THE SPIRITUAL HEALTH OF ONCOLOGY PATIENTS: A COMPARISON
OF NURSE AND PATIENT PERCEPTIONS

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BY

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To the Dean for Graduate Studies and Research:

I am submitting herewith a dissertation written by Martha Ellen Farrar Highfield entitled "The Spiritual Health of Oncology Patients: A Comparison of Nurse and Patient Perceptions." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements of the degree of Doctor of Philosophy, with a major in Nursing.

Dr. Carolyn M. Adamson, Major Professor

We have read this dissertation and recommend its acceptance:

Accepted

Dean for Graduate Studies and Research
DEDICATION

To my three gifts,

Ron, Nathanael, and Matthew,

With all my heart.
THE SPIRITUAL HEALTH OF ONCOLOGY PATIENTS: A COMPARISON OF NURSE AND PATIENT PERCEPTIONS

ABSTRACT

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Nurses who are committed to care of the whole person must be knowledgeable about patients' spiritual needs. This descriptive, cross-sectional survey was designed to investigate the spiritual health of oncology patients. Parallel nurse (r = .89) and patient (r = .77) Spiritual Health Inventories (SHI) and demographic sheets were distributed to a convenience sample of 40 nurse-inpatient pairs from two hospitals. Respondents included 23 patients with primary lung cancer and 27 Registered Nurses. Patients reported a normatively high level of spiritual health, positively related both to age (p < .02) and physical well-being (p < .014). Analysis of 21 matched nurse-patient SHI scores indicated that nurse respondents inaccurately assessed their patients' spiritual health. Patients and nurses ranked family members or friends and clergypersons as
priority choices of spiritual caregivers. Although not generalizable, findings should assist in future studies.
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CHAPTER 1

INTRODUCTION

Physical illness often provokes a search for meaning in suffering, illness, and death. The individual may confront new uncertainties in relationship with self, others, and a supreme being and may find previously used coping strategies inadequate to deal with an unknown future. Separation from significant others due to hospitalization and treatment may accentuate the person's search for meaning and fears about the future.

Such concerns are common among persons with cancer. Fear of death and an unknown future are primary concerns of cancer patients during the early days after diagnosis, and these continue to some degree throughout the person's life (Weisman, 1979). Such fears encompass not only anxiety about the end of physical life, but also anxieties about "abandonment, loss of control, loneliness, [and] pain" (Weisman & Worden, 1976, p. 14). Pastoral counselors, theologians, and nurses define fear about the meaning of life, suffering, and death as a spiritual or ultimate concern (Byrne & Price, 1979; Clemence, 1966; Clinebell, 1966; Hirano, 1978; Tillich, 1952; Vastyan, 1986).
Clergy or significant others may assist the individual in dealing with these spiritual concerns; however, once hospitalized the person may ask for help from the most accessible person, the nurse. The nurse, therefore, must be prepared to recognize and intervene in spiritual distress (Carey, 1974; Fish & Shelly, 1988).

Several obstacles may interfere with the nurse's attention to the spiritual concerns of ill persons. The first is the relative lack of nursing literature, research, and educational opportunities related to the spiritual dimension. Second, the illness-care focus of the health care system in this country emphasizes meeting acute biological and psychosocial needs, and this focus may result in neglect of spiritual needs (Steiger & Lipson, 1985). Finally, when caring for the oncology patient, the nurse as well as the patient may experience fear about the meaning of suffering, illness, and death. The distress of the nurse may prevent effective support of the patient who is searching for satisfactory answers to spiritual questions (Granstrom, 1985; Quint, 1965).

Problem of Study

Little is known about the spiritual needs of oncology patients or how well oncology nurses assess these needs. Therefore, the following questions will be addressed by this study: Does the nurse-assessed spiritual health of oncology patients differ from the self-reported spiritual health of oncology patients? What factors are
related to the spiritual health of oncology patients and the spiritual health assessments made by nurses?

Rationale for Study

Although nursing theorists and educators have long noted the importance of the spiritual dimension (Hubert, 1966; Johnson, 1959; Rogers, 1971; Carson, 1989), nurses have yet to agree upon a common definition of the spiritual needs of persons (King, 1984; Steiger & Lipson, 1985). Some authors have defined spiritual needs only in terms of specific religious faiths and activities (Byrne & Price, 1979; "Recognizing", 1977). Others insist that "spirituality must become more than the sum of the client's religious preference, religious beliefs, and religious practices" (Ellerhorst-Ryan, 1984, p. 93). Clinical research can provide the needed clarification of these issues.

Spiritual care research fits within established nursing research priorities. In 1979, Abdellah and Levine identified priorities for nursing research which included:

- Studies of clinical problems related to nursing practice, especially descriptive studies of physiological and behavioral responses of patients with various diagnoses to varied settings, both institutional and noninstitutional,...
- Studies to develop models and theories of nursing practice,...[and]
- Studies of life-threatening situations, anxiety, pain, and stress." (p. 659)

These priorities will be addressed by this study.
Although the spiritual health of patients has been identified as an appropriate concern for nursing practice (Carson, 1989; Stallwood & Stoll, 1975), few researchers have described this phenomenon. Nurses who are concerned with the whole person, however, must be able to assess spiritual health (Johnson, 1959; Orem, 1985; Rogers, 1970; Stallwood & Stoll, 1975). Descriptive research can elicit patients’ subjective experiences of spiritual health or distress and can identify congruence between perceptions of patients and nurses.

Authors, writing from both clinical and research perspectives, have identified cancer patients as a group at risk for spiritual distress. The oncology patient is faced with a life-threatening, anxiety-provoking illness (Hirano, 1978; Weisman, 1979; Weisman & Worden, 1976). Cancer is a serious chronic disease and the second leading cause of death in the United States (Silverberg & Lubera, 1989), and the patient's awareness of this physical threat is heightened by the societal view of a cancer diagnosis as a death sentence. In order to help individuals deal with this disease, nurses must be able to recognize behavioral responses, including the spiritual ones, to this life-threatening and fearful situation (Vastyan, 1986; Weisman, 1979).

A few nursing authors using small convenience samples have described the spiritual health of patients, but the cumulative value of these studies is limited by three factors. First, researchers used
a multiplicity of different frameworks preventing easy comparison of results. Second, their results cannot be generalized because of convenience sampling, sometimes involving as few as 13 subjects, and third, almost all these researchers surveyed either patients alone without professional validation of patient-identified spiritual concerns, or surveyed nurses alone without patient validation of nurse-assessed concerns (Chance, 1967; Crigger et al., 1984; Ford, 1987; Hess, 1962; Highfield, 1981; Highfield & Cason, 1983; Martin, Burrows, & Pomilio, 1976; Nelson, 1976; Phinney, 1987; Slaughter, 1979, Thompson, 1987). Still these studies have inspired further research investigating the phenomenon of the spiritual health of patients.

Only two studies were conducted in which the authors compared matched nurse-patient perceptions of spiritual or religious concerns. In the first Crigger, Thompson, Simmons, King, and Highfield (1984) compared nursing assessments of spiritual health with self-reported spiritual health of patients within a large secondary care setting. They found no difference between 41 matched nurse-inpatient pair ratings of the spiritual health of the patients ($p < .05$). These authors concluded, therefore, that nurses were accurately assessing the spiritual health of their patients.

Later Sodestrom and Martinson (1987) used a semi-structured interview to determine whether oncology nurses were accurately assessing the religious coping strategies used by their patients.
Their interviews of 25 matched oncology nurse-inpatient pairs indicated that nurses were accurately identifying some of the support persons their patients used to meet spiritual needs, but were not adequately assessing the religious activities (i.e., prayer, reading religious material, communion, etc.) important to patients.

A few authors have also addressed the spiritual health and religious concerns of oncology patients as a separate population. Sodestrom & Martinson (1987), mentioned above, and Reed (1986) examined the religious coping strategies of oncology patients, and Slaughter (1979) identified spiritual concerns and needs of this group. In the Sodestrom and Martinson study (1987), 88% of 25 oncology patients reported using religious activities or supportive persons in coping with their disease, while Reed (1986) found that terminally ill patients focused more on religious concerns than did their matched, healthy counterparts ($N = 114$) ($p < .001$). Slaughter's (1979) use of a limitedly defined framework, a small convenience sample ($N = 13$), and an unestablished tool make the results of her study difficult to interpret.

Weisman and Worden (1975, 1976), a physician-psychologist team, conducted studies in which they described some of the factors affecting the level of existential crisis experienced by over 100 adult persons with cancer. While these authors did not label patient existential concerns as spiritual, their description of existential concerns included problems identified as spiritual by others.
(Clinebell, 1966, 1979; Hirano, 1978; Tillich 1952). Their investigations of the relationship of both pre-existing psychosocial variables, (eg., social support, coping strategies, values, etc.) and physiological status to cancer and its treatment indicated that generally positive and cooperative patients with adequate support and responsive relationships experienced less distress and lived for longer periods than expected. On the other hand, apathetic or depressed patients who had inadequate psychosocial support and mutually destructive relationships experienced more existential distress and lived for shorter periods than expected. The authors recommended further studies investigating the responses of oncology patients to diagnosis and treatment, noting that quality of life and compliance with treatment are related to individual coping resources (Weisman, 1979; Weisman & Worden, 1975, 1976; Worden, 1983).

Despite an awareness that personal and professional attributes of nurses may affect care of individuals with cancer (Granstrom, 1985; Quint, 1965), research identifying those factors has also been limited and inconclusive (Crigger et al., 1984; Sodestrom & Martinson, 1987; Thompson, 1987). While Crigger et al. (1984) identified a negative correlation between nurses' years of practice and the spiritual health nurses attributed to patients, other authors found no relationship either between these variables (Thompson, 1987) or between years of practice and assessment of patient
religious coping strategies (Sodestrom & Martinson, 1987). Further, while Sodestrom and Martinson (1987) found that their convenience sample of nurses assessed religious coping strategies of patients more accurately when the nurse reported knowing the patient well, no other study examining this relationship has been published. Authors investigating the relationship between spiritual health assessment and other variables, including nurse spiritual care classes, self-appraised ability to assess spiritual concerns, and length of time spent caring for the patient, have identified no significant relationships among variables, but generalizability of findings is limited because of the use of convenience sampling in all studies (Crigger et al., 1984; Sodestrom & Martinson, 1987; Thompson, 1987).

Finally, this study will contribute to the development of "models and theories of nursing practice" (Abdellah & Levine, 1979, p. 659) by clarifying some of the concepts related to spirituality. Some nurse theorists have developed conceptual frameworks for investigating spiritual health (Fish & Shelly, 1988; Highfield, 1981; Stallwood & Stoll, 1975), but further development of concepts is needed, and current research is inadequate to support any model. The examination of self-reported and nurse-assessed spiritual health will be used to test statements derived from the Highfield conceptual framework. The purpose of this study is to increase the nurse's knowledge of the spiritual health of the oncology patient.
Conceptual Framework

The conceptual framework of this study is the Highfield Conceptual Model of Nursing (see Appendix A). In the Highfield Model the person is described as a whole biological, psychosocial, spiritual being interacting with stimuli in the external environment. Many persons are capable of meeting their biological, psychosocial, and spiritual needs successfully through this interaction, and these persons are considered healthy. Those persons unable to meet needs may require knowledgeable and creative nursing assistance.

In the Highfield model, this nursing assistance is described as nursing practice, a unique combination of science and art brought to bear on the needs of the client. In professional nursing practice scientific empirical evidence and artistic creativity are mediated by nursing judgement in order to achieve the goal of nursing practice: assisting persons to move toward the highest level of health possible. Achievement of this goal is made possible through use of the nursing process, a decision-making model that guides practice (Orem, 1985; Rogers, 1970; Roy, 1976).

Operationally defined, the nursing process consists of six phases: assessment of client behavior, assessment of factors affecting the client's behavior, problem identification, goal setting, intervention, and evaluation. Assessment includes gathering data about patient behavior and factors that influence patient behavior. Specific problems are then identified based on assessment data, and
nursing diagnoses are formulated and prioritized. Goals are mutually planned, and specific interventions developed and implemented. Finally the plan is evaluated by examining its effectiveness in meeting patient goals and is modified as necessary (Roy, 1976) (see Appendix B).

The focus of the nursing process is the person, a complex integrated being whose whole is more than and different from the sum of the biological, psychosocial, and spiritual parts (Johnson, 1959; Rogers, 1970; Roy, 1976; Stallwood & Stoll, 1975). Each dimension, or part, is a reflection of the whole person, and each can be operationally defined as a set of universal human needs. When needs are met the result is health or wellness; when needs are not met the result is sickness or at best, absence of illness (Clinebell, 1979; Maslow, 1968). Because each person is an integrated whole any met or unmet need affects all dimensions of the person (Clinebell, 1979). Those needs which are met become the person's assets for dealing with problems, while unmet needs become limitations. Knowledge of the biological, psychosocial, and spiritual needs is therefore essential for the nurse to assess an individual's current health status.

Clinebell (1979), a professor and pastoral counselor, defined the healthy person as one who is growing, or meeting needs, in each dimension of self. He directed much of his attention to spiritual growth and its effect on the whole person.
Spiritual growth [he said] is at the heart of all human growth because it has to do with those things that most clearly define us as being distinctively human. Spiritual growth aims at the enhancement of our realistic hope, our meanings, our values, our inner freedom, our faith systems, our peak experiences, and our relationship with God. (p. 37)

Based on his clinical experiences, Clinebell (1966) also described four overlapping, universal, spiritual needs:

1. The need for a meaningful philosophy of life and a challenging object of self-investment.
2. The need for a sense of the numinous and transcendent.
3. The need for a deep experience of trustful relatedness to God, other people, and nature.
4. The need to fulfill the "image of God" within oneself by developing one's truest humanity through creativity, awareness, and inward freedom. (p. 251)

In the present study a modification of Clinebell's (1966) list of needs was used to examine the spiritual dimension. When Highfield (1985) used oncology and medical-surgical nurses' assessments of the spiritual health of their patients to test Clinebell's (1966) list of four spiritual needs, she found by factor analysis that items clustered into three not four areas of spiritual need (N = 52). These three spiritual needs were: (a) the need for self-acceptance; (b) the need for trusting, nonconditional, and forgiving relationships with others and/or a supreme being; and (c) the need for hope. Spiritual health was identified as the state that exists when spiritual needs are met (Clinebell, 1966, 1979), and for the current study was operationally defined as the state that exists when the above needs for self-acceptance, relationships, and hope are met.
The spiritual dimension is closely linked with the psychosocial dimension, and Clinebell (1979) used the term "mental-spiritual-relational health" (p. 18) to describe this integration. Clinebell (1979) described persons as having a need for growth in six dimensions, including the mind. His description of the need for "enlivening one's mind" (p. 20) formed the basis for this study's definition of the psychosocial dimension as the sentient capacity of persons to experience the environment through the five senses and to react rationally and emotionally to stimuli. The sentient capacity of persons is that which allows them to be "responsive to or conscious of sense impressions" ("Webster's," 1973, p. 1056). After a review of nursing models, psychosocial needs were identified as: (a) the need to accomplish developmental tasks, (b) the need to fulfill familial and cultural roles, and (c) the need for sexual gratification. Religious background, education, and socioeconomic status were identified as psychosocial factors affecting the ability of persons to meet basic needs (Johnson, 1980; Maslow, 1968; Orem, 1985; Roy, 1976).

The biological dimension, also linked with all other dimensions, is the physical structure and physiological functioning of persons. A review of nursing frameworks suggested the following list of biological needs: the needs for food, water, oxygenation, exercise/rest, elimination, and intact bodily systems (Johnson, 1980; Orem, 1985; Roy, 1976). Age, ethnic origin, sex, genetic
background, and medical diagnoses were identified as physical factors affecting the ability of persons to meet basic needs (Orem, 1985).

The ability of a person to satisfy spiritual, psychosocial, and biological needs is affected by perception of and response to the external environment. The environment consists of those factors outside of the individual which either positively or negatively affect the ability of the person to meet basic needs. Every person is subjected to multiple environmental stimuli which may be perceived as harmful or as pleasurable (Lazarus, 1966; Maslow, 1968; Orem, 1985; Roy, 1976), and each individual responds to the environment as a whole person with unique assets and limitations. If the stimuli are greater than the person's total resources then illness results (Roy, 1976)--basic needs are not met. If stimuli are equal to the resources of the individual then there may be an absence of illness, but the person must struggle to minimally meet basic needs (Maslow, 1968; Roy, 1976). In these two instances the person uses a deficiency-motivated pattern of living to meet whatever basic need is pressing for satisfaction. The deficiency-motivated individual is dependent upon the environment to satisfy needs (Maslow, 1968).

On the other hand, if the person's resources are greater than the stimuli, or the stimuli promote development of biological, psychosocial, or spiritual resources, then the person will exhibit growth-motivated behavior (Maslow, 1968) and will be healthy.
(Clinebell, 1979; Roy, 1976). The growth-motivated individual uses a pattern of living in which there is pleasure in the process of self discovery. Clinebell (1979) called this dynamic process "developing wholeness" (p. 19), or health. The growth-motivated individual has an increased focus on the quality of life sustaining spiritual needs, since physical life sustaining needs have been met (Clinebell, 1979; Maslow, 1968).

The goal of nursing is to assist the client toward health, a growth-motivated state in which biological, psychosocial, and spiritual needs are being met. To attain this goal the nurse must help the individual develop a positive person-stimuli interaction in which the person can both control stimuli and use stimuli to enhance growth. The nurse uses the nursing process in achieving this goal. An assessment of the person's behaviors and of the environmental factors affecting those behaviors forms the basis for problem identification and diagnosis. The nurse and client then mutually set goals based on the desired person-stimuli interaction. The nurse can help the individual to identify instances when stimuli are greater than personal resources and to plan and implement strategies for increasing personal resources. Evaluation of goal achievement reflects the effectiveness of the plan. If nursing intervention assists the person in meeting biological, psychosocial, and spiritual needs then a positive person-stimuli interaction is achieved.
Spiritual need fulfillment (i.e., spiritual health) must be studied within the context of the total person-environment interaction. A positive interaction results in spiritual health, while a negative interaction results in spiritual distress. The purpose of the present study was to examine the spiritual health of oncology patients within the context of physical and psychosocial factors which may be related to spiritual health. Such factors include intensity of symptoms, age, sex, religious affiliation, and frequency of attendance at religious functions. If factors related to spiritual health or distress are identified, the health of the total person can be facilitated through improved spiritual assessment, goal setting, intervention, and evaluation.

The current project focused both on self-reported and nurse-assessed spiritual health of the oncology patient. The first concern of the project was an investigation of the spiritual health of the patient responding to the diagnosis of cancer. The person with cancer is confronted with environmental stimuli including hospitalization, separation from significant others, and expensive and/or painful treatments and tests. These stimuli are perceived as threatening to the person's life, relationships, and sense of meaning (Vastyan, 1986; Weisman, 1979; Weisman & Worden, 1976), and so become a threat to spiritual health (Clinebell, 1979; Granstrom, 1985; Sodestrom & Martinson, 1987). When these threats impact the patient, the individual responds as a total person with all personal
biological-psychosocial-spiritual assets and limitations. How much physical and psychosocial factors are related to the spiritual health of the oncology patient is unknown.

The second concern of this project was an investigation of the spiritual health assessments made by the nurse responding to the person with cancer. In caring for the individual with cancer the oncology nurse is confronted with environmental stimuli which may be perceived either as a threat (Quint, 1965) or as an opportunity for giving of oneself (Granstrom, 1985). The physical, psychosocial, or spiritual status of the patient as a part of the nurse's environment may test the personal assets and limitations of the nurse and create for the nurse a negative or positive person-stimuli interaction. This in turn may affect the ability of the nurse to accurately assess the spiritual health of the client. What physical and psychosocial characteristics of the nurse and patient are related to nursing spiritual health assessment are unknown.

Assumptions

For purposes of this study it was assumed that:

(1) The whole person is more than and different from the sum of the parts (Rogers, 1970);

(2) The biological, psychosocial, and spiritual dimensions of persons are expressions of the whole person (Rogers, 1970; Roy, 1976);

(3) The biological, psychosocial, and spiritual dimensions of
persons are integrated and interdependent dimensions which cannot be fully separated (Clinebell, 1979; Johnson, 1959; Rogers, 1970; Roy, 1976); and

(4) The whole person is constantly in interaction with and affected by the environment (Rogers, 1970; Roy, 1976).

Research Questions

The level of spiritual health of oncology patients and the factors affecting the extent of their spiritual concerns have not been adequately described. Additionally it is not known whether nurses accurately assess the spiritual health of their patients or what factors affect such assessment. Therefore, this descriptive, cross-sectional survey was designed to answer the following research questions:

(1) What level of spiritual health is reported by oncology patients?

(2) Is there a difference between the self-reported spiritual health of oncology patients and the nurse-assessed spiritual health of those patients?

(3) What is the relationship between patient (a) age, (b) frequency of attendance at religious functions, or (c) intensity of symptoms and the level of spiritual health reported by oncology patients?

(4) Is there a difference in the spiritual health reported by oncology patients based on patient (a) sex or (b) religious preference?
(5) What is the relationship between nurse (a) age, (b) level of education, (c) frequency of attendance at religious functions, (d) years of nursing practice, or (e) time spent caring for a patient and the level of spiritual health attributed to oncology patients by their nurses?

(6) Is there a difference in the level of spiritual health attributed to oncology patients by their nurses based on the nurses' (a) attendance at a course on spiritual care, (b) religious preference, or (c) ethnic background?

(7) What is the relationship between patient (a) age or (b) intensity of symptoms and the level of spiritual health attributed to oncology patients by their nurses?

(8) Is there a difference in the level of spiritual health attributed to oncology patients by their nurses based on the matched patients' (a) sex or (b) religious preference?

(9) Whom do patients identify as best able to help with their spiritual concerns?

(10) Whom do nurses identify as best able to help patients with their spiritual concerns?

(11) Is there a difference between nurse-identified and patient identified spiritual care helpers?
Definitions

For purposes of this study, the terms spiritual dimension, spiritual health, spiritual distress, and religion were defined as follows:

(1) The spiritual dimension is the ability to transcend self (i.e., the ability to view self as an object) resulting in a search for meaning in existence and experiences (Clemence, 1966; Clinebell, 1966, 1979) and is phenomenologically reflected in three universal human needs:

(a) The need for self-acceptance, which is the need to have self-value resulting from a trusting and forgiving relationship with self. This need encompasses finding values which are based on a felt responsibility to God, self, or others and which support meaning and purpose in life (Clinebell, 1966; Frankl, 1963/1970).

(b) The need for relationships characterized by nonconditional love, trust, and forgiveness with others and/or a supreme being. This is the need to receive and give love (Clinebell, 1966, 1979; Stallwood & Stoll, 1975; Travelbee, 1971).

(c) The need for hope, which is the need to imagine and participate in the enhancement of a positive future. Having hope includes a sense of inner freedom, a sense that one can choose how to react to circumstances in which one feels little control (Clinebell, 1966; Roberts, 1986).
(2) Spiritual health is the state that exists when the spiritual needs for self-acceptance, relationships, and hope are met; it encompasses finding satisfactory answers to the ultimate questions of meaning in life, suffering, and death (Clinebell, 1966, 1979; Highfield, 1981). Spiritual health is operationally defined as a score above a hypothesized mean of 93 on the normatively scored Spiritual Health Inventory (SHI).

(3) Spiritual distress: Spiritual distress is the state that exists when the spiritual needs for self-acceptance, relationships, and hope are not met; it is an unfulfilled search for answers to the person's ultimate questions (Carpenito, 1983; Clinebell, 1966; Highfield, 1981). Spiritual distress is operationally defined as a score below a hypothesized mean of 93 on the normatively scored Spiritual Health Inventory (SHI).

(4) Religion consists of the individual and community values, beliefs, and practices through which persons attempt to fulfill their spiritual needs (Clinebell, 1966, 1979; Hubert, 1963). It is operationally defined as the denomination or world religion with which the individual identifies self.

(5) Intensity of symptoms is the extent to which cancer or its treatment causes physical suffering ("Webster's," 1973; Weisman & Worden, 1976). Operationally defined, intensity of symptoms is a subjective report by the patient of physical well-being. Patients in this study were asked to report on a one
to five ordinal scale whether they felt physically well all of the time, most of the time, some of the time, almost never, or never. A score of one indicated high symptom intensity (i.e., the person reported never feeling well), and a score of five indicated low symptom intensity (i.e., the person reported feeling physically well all of the time).

(6) Frequency of attendance at religious functions is how often the person attends organized religious activities (Byrne & Price, 1979), and operationally is the self-reported number of times the person attends such functions each year.

Limitations

The target population of this study included inpatients with lung cancer and their Registered Nurses from two large, religiously-affiliated, nonprofit hospitals in the southwestern United States. All eligible and consenting patients and nurses, who were in the hospitals on the days of data collection, constituted the sample. Therefore, findings of this study cannot be generalized to the target population because of potential systematic and random errors introduced by nonrandom sampling (Abdellah & Levine, 1979). Further, because of the descriptive, non-experimental design used in this study, unidentified extraneous variables may have exerted systematic or random effects on the spiritual health of patients and its assessment by nurses. Thus, only associative relationships
among variables can be assumed; no cause and effect relationships can be inferred (Abdellah & Levine, 1979).

**Delimitations**

Delimitations imposed by the researcher on this study included:

1. Limitation of the patient sample to adult inpatients with primary lung cancer, who were oriented, physically able to complete the questionnaire, and who spoke English as a primary language; and

2. Limitation of the nurse sample to Registered Nurses who cared for patients in the sample.

Inpatients and nurses were chosen because of increased potential nurse-patient contact and because hospitalized patients may have increased spiritual or existential concerns (Highfield 1981; Weisman, 1979). Because this was a questionnaire study requiring adult patients who were able to respond to questions in English, the sample was further limited to patients over the age of 18, who were oriented and physically able to complete the questionnaire. It was not considered necessary that nurse subjects speak English as a primary language, since the ability to pass licensing examinations administered by a state board of nurse examiners and to work in a United States’ health care facility indicated an adequate grasp of the language. Patients were also limited to those with primary lung cancer in order to provide a more
homogeneous sample. This diagnostic category was chosen because lung cancer is the leading cause of cancer mortality among both males and females (Silverberg & Lubera, 1989).

Summary

Because little is known about the spiritual health of oncology patients or how well nurses assess the spiritual health of these patients, the Highfield model was proposed as a framework for a descriptive, cross-sectional survey of Registered Nurses and their patients with lung cancer. Assumptions, limitations, and delimitations of the study were presented, and nominal and operational definitions were offered for the following independent and dependent variables: spiritual health, spiritual distress, religion, frequency of church attendance, and intensity of symptoms.
CHAPTER 2

REVIEW OF THE LITERATURE

Nurses describe their professional uniqueness as care of the whole person. Therefore, assessing the spiritual dimension of patients has become a critical task for the profession which can no longer be relegated to a peripheral, special interest project. A review of spiritual needs as identified by patients and nurses and a discussion of nursing assessments of patients' spiritual health can provide a context for the current study.

Spiritual Health and Distress

Nursing authors have conducted descriptive surveys of both nurses and patients in an attempt to identify and operationalize the spiritual health and distress of patients. While published studies and master's theses related to spiritual health of patients continue to accumulate, none are generalizable because the researchers were limited by one or more of the following: untried instruments, small convenience samples, and sometimes unclear frameworks and definitions. The value of these studies is primarily to raise unanswered questions about spiritual needs of patients. A review of
findings related to nurse and patient perspectives on spiritual health is therefore merited.

Nurses' Perspectives

Defining spiritual needs as faith in, hope in, and love for God, Chance (1967) surveyed 37 senior nursing students at three Seventh Day Adventist Colleges to determine their awareness of the spiritual problems of patients. Ten students identified no spiritual concerns among their patients, but the other twenty seven listed spiritual "needs" ranging from the religiously-oriented "need to go to church...[and] acceptance by God as she is a sinner" (p. 73) to the existentially-oriented "courage to face the future...[and] need for close association" (p. 73). These patient concerns were not validated with clients, but were identified by student respondents using recall.

Although Chance used the term spiritual needs to describe patient concerns listed by respondents, she could more accurately have called them indicators of spiritual distress, as evidenced by her definition of spiritual needs as faith in, hope in, and love for God. Her conclusion, that nurses perform accurate spiritual assessments, was not supported by her design since she used a convenience sample of nursing students from religiously-affiliated schools, not a random sample of practicing nurses. A more accurate conclusion would have been that these nursing students recognized client spiritual concerns.
A decade later Nelson (1976) asked 27 nurses enrolled in a graduate program in maternal-child health to list spiritual needs they had identified among patients. Nelson defined spiritual needs as "any factors necessary to establish and maintain a person's dynamic personal relationship with God (as defined by that individual)" (Stallwood & Stoll, 1975, p. 1088), but did not share this definition with respondents. While 4 respondents did not identify any spiritual needs among their patients, 23 respondents identified the following:

Need to talk to clergy (n = 6), need to accept one's condition (abortion, defective infant, death) (n = 4), need to talk about the illness (n = 4), lack of faith in the God they said they believed in (n = 2), lack of self-acceptance; lack of self-confidence (n = 2), fear (n = 2), need for privacy for prayer (n = 1), need to have more of God (n = 1), [and] need for Catholic family to overcome fear of having another defective child (n = 1). (p. 58)

These responses, like those from Chance's (1967) study, reflected a mixed list of existential and religious indicators of spiritual distress, as well as basic spiritual needs. Data from both studies, however, require validation with patients and a conceptual sorting out before being used to guide spiritual assessment.

Patients' Perspectives

Several authors have tried to identify patient perceptions of spiritual concerns. While these authors did not use the term spiritual distress, the patient expressions identified as spiritual needs or problems were similar to or the same as the etiologies and
defining characteristics of spiritual distress identified during Nursing Diagnoses Conferences (Hurley, 1986; Kim, McFarland, & McLane, 1984; Kim & Mortiz, 1982; McLane, 1987). Like nurses, patients identified both religious and existential concerns as spiritual concerns.

As early as 1969, Hess reported using a semi-structured interview to survey 109 inpatients in different geographic locations in the United States to elicit perceptions of their own spiritual problems. When Hess asked patients to describe any "spiritual needs" (p. 158) experienced during hospitalization, the most frequently mentioned need was the desire for prayer—privately, with another, or receiving prayer from others. Patients also listed the following:

- loneliness,
- assurance of God's presence and help,
- fear of surgery and death,
- need to find meaning and purpose in life, death and suffering, feelings of guilt, loss of faith and doubt,
- [and] the need to express faith by visible and tangible means such as Bible reading, Holy Communion, church attendance and the lighting of candles. (p. 158)

This listing of spiritual concerns reflected a common understanding of the term "needs" as wants or desires, rather than a precise scientific definition. By not providing patients with a definition of spiritual needs, Hess allowed patients to respond to the term based on personal interpretations. The result was that some patients listed basic spiritual longings, such as the need for meaning.
(Clinebell, 1979; Hubert, 1963), while others listed desired interventions, such as Holy Communion.

In later interviews with 65 adult inpatients, 31 (48%) stated that they had experienced a spiritual need (Martin et al., 1976, p. 165) (again undefined for respondents or reader) during their hospitalization. The existential and overtly religious concerns named by respondents indicated spiritual distress. Unmet spiritual needs for a loving, forgiving, trusting relationship with God, self, and others, for meaning and purpose in life, and for hope were evidenced by responses of both male and female subjects.

[Men expressed needs] for support, hope, help, conversation, a relationship to God and freedom from discouragement....[Women listed] relief from nervousness, worry, fear, loneliness; concern for husband and children; fears of tests and diagnosis; knowledge of God's presence and relatedness; need for calmness, comfort, salvation, help; desire to see a clergyman; communion; reason for suffering. (p. 165)

Two female subjects and half the male subjects who acknowledged a spiritual concern did not wish to share it with the researchers because they felt the need was too personal.

The sex of these respondents was related both to their reporting of spiritual needs and to their desire for intervention. In addition to differences in spiritual needs listed above, female patients reported a greater desire for spiritual care in the hospital setting than did their male counterparts ($p < .01$). Further, male and female patients in another study also listed different spiritual needs, but the sample

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was small ($N = 13$), and the researchers did not test for significance (Weatherall & Creason, 1987).

Respondent religious affiliation was also related to identification of spiritual needs by patient respondents. Martin et al., (1976) found that Protestants and Catholics differed in ranking of spiritual needs, but these differences were not tested for significance. When given a list of spiritual "needs" (p. 170) identified in other studies, including "relief from fear of death, visit from a clergyman, prayer, knowledge of God's presence, purpose and meaning in life, expression of caring and support from another person, [and] sacraments, [including] communion" (p. 170), members of each religious affiliation ranked each item at a different level of importance. These Protestant-Catholic variations in ranking may result from religious distinctions in value-orientation (Rokeach, 1973) or in creeds, mores, and rituals (Hubert, 1963).

Three years later Slaughter (1979) attempted to identify the self-reported spiritual needs of 13 nonreligious (23%), Catholic (31%), and Protestant (46%) oncology inpatients. The stated purposes of her study were to operationally define spiritual needs, to begin tool development, to measure spiritual needs, and to determine relationships between the nature and importance of spiritual needs. To accomplish these objectives Slaughter provided patient respondents with the Nature Subscale, a list of 12 spiritual needs identified from the literature and validated by 5 nurses in
graduate school. Slaughter asked respondents to check every item experienced during their current hospitalization. Many of these items were identified from the two studies cited above (Hess, 1969; Martin et al., 1976). Slaughter also asked patient respondents to rank, on a Likert-type, Importance Subscale, 14 statements reflecting the same items listed on the Nature Subscale. Since the tools were investigator-designed for this study the only reliability data were based on study findings and showed a coefficient alpha of $\alpha = .87$ for the Nature Subscale and $\alpha = .74$ for the Importance Subscale. No validity data were cited.

While Slaughter's sample indicated that some religiously-oriented "needs" occurred frequently, religious sacraments, rituals, and religious readings were not as important to most subjects as were the needs for God's love, "things to work out, [and]...thinking about my meaning and purpose in life" (p. 39-40). Over two-thirds of the respondents (69.2%) identified hope as their most commonly experienced spiritual need. Frequency of occurrence of other needs listed in descending order were the needs for prayer (62%), purpose in life (54%), God's love (46%), clergy visit (39%), reading religious materials (39%), a reason for suffering (39%), belief in God (39%), life after death (31%), forgiveness (31%), relief from guilt (31%), and participation in rituals (23%). When examining patient responses to the Importance Subscale, Slaughter found that "For me
to know that God loves me” (p. 39) was extremely important to 61% of the sample.

While these studies may provide some preliminary data, one of the primary limitations is the lack of clear conceptual grounding. For example, Hess (1969) and Martin et al. (1976) provided the reader with no definition of spiritual needs. Slaughter (1979), on the other hand, provided a definition of spiritual need, but her definition lacked precision and clarity. Slaughter defined spiritual need as

any factor that influences the religious concerns from a structured system of beliefs and rituals, that influences the internal condition of the individual in his perception of the unseen and eternal, or that influences the relationship to a supreme being as defined by the individual. (p. 7)

To say a spiritual need is "any factor that influences" (p. 7) indicates only a loose, unspecified association between an infinite number of variables. Further, the similarity between the findings of Slaughter and previous researchers (Hess, 1969; Martin et al., 1976) is probably a result of those authors' influence on development of the Nature and Importance Subscales, rather than an actual substantiation of their findings.

In 1986, Phinney used a qualitative, phenomenological approach to identify themes from the responses of 10 individuals, aged 54 to 92 years, to an open-ended interview. Five subjects were Catholic, four were Protestant, and one claimed a non-Christian religious affiliation. He found that all subjects associated the term spiritual
needs with a relationship with God and creation. Themes of spiritual connections, seeking a oneness with the cosmos and relationship with God and others, and themes of spiritual disjunctions, being blocked from oneness and relationships, surfaced from the data. Disjunctions were indicated by participant statements about the following: events and persons interfering with church activities, questioning how God could allow the atrocities committed during World War II, unanswered prayers, death of family members, and disappointments in clergy or fellow believers. Connections were indicated by statements about involvement in service projects with a church group, a meaningful religious dream, connections between work and spiritual life, the conversion of family members, writing and reading religious material, and personal conversion experiences. The responses of Phinney's (1986) subjects indicated that they felt a strong relationship between their religious faiths and their "spiritual life stories." Even though the interviewer used open-ended questions and did not use religious terms such as God, church, or religion, respondents associated the word spiritual with religious beliefs and practices, and the responses of subjects to this term were related to the integration of their various faiths into their work, health, relationships, and lives.
Assessment of Spiritual Health and Distress

For decades, nursing authors have documented the unwillingness or inability of nurses to listen to patients' ultimate questions about life, suffering, meaning, and death (Highfield, 1981; Highfield & Cason, 1983; Quint, 1965; Sodestrom & Martinson, 1987). Some theorists and educators have gone a step further, asserting that nurses should not become involved with the ultimate, or spiritual, questions of patients. Reporting that 34 of 60 elderly, institutionalized patients (54%) said they would not ask a nurse for spiritual help and that 8 (13%) were unsure, DeYoung (1986) concluded that patients do not believe nurses should be involved in spiritual care. Since spiritual assessment is the first step in spiritual care, the implication of DeYoung's position would be to delete spiritual health assessment from nursing practice. In contradiction to her own position, however, DeYoung's statement that Christian nurses should be involved in spiritual care with "patients who desire it" (p. 32) raises questions about the consistency with which the author is willing to apply her conclusion.

Similarly, participants in the Fifth Conference on Nursing Diagnoses stated that the nurse may not have a role in spiritual care, suggesting that participants' acceptance of the diagnosis, Spiritual Distress, "may be an outcome of the historic foundations of nursing in religious orders and not consistent with current practice" (Kim et al., 1984, p. 111). Conference participants questioned
whether nurses should take any action other than referral for spiritual concerns, and if referral is the only action required, whether Spiritual Distress should be a nursing diagnosis at all. The consequences of deleting the diagnosis Spiritual Distress along with its defining characteristics and etiologies would promote nurses' inattention to and less than systematic assessment of the spiritual health of patients.

In contrast, the importance of assessing spiritual concerns of patients has been stressed by nursing authors almost too numerous to list (Burnard, 1987; Carson, 1989; Carson & Gerardi, 1985; Chadwick, 1973; Clemence, 1966; Dettmore, 1984; Dimeo, 1980; Emmer & Browne, 1984; Fish & Shelly, 1988; Highfield & Cason, 1983; Hubert, 1963; Kiening, 1978; Piepgras, 1968; Ryan, 1984; Stallwood, & Stoll, 1975; Stoll, 1979; Travelbee, 1971). Additionally, patients (Hess, 1969; Martin et al., 1976; Sodestrom & Martinson, 1987), psychologists (Jourard, 1966) and clergy (Hirano, 1978) have identified nurses as appropriate spiritual caregivers. Despite the writings of these authors and the continuing accumulation of research data, whether nurses know how or what to assess when it comes to the spiritual health of patients is unknown.

Several researchers have tried to identify factors which may affect the ability of the nurse to assess spiritual or religious concerns of patients, yet no findings are conclusive. Factors investigated have included (a) the confusion in differentiating...
religion and psychosocial and spiritual needs, (b) the nurse's personal religious convictions, (c) the nurse's personal experiences, (d) educational preparation of the nurse, (e) age of the nurse, (f) nursing experience, (g) number of shifts spent caring for a patient, (h) how well the nurse reported knowing the patient, (i) self-appraised ability of the nurse to assess spiritual health, and (j) the nurse's spiritual well-being (Crigger et al., 1984; Davis, 1980; Ford, 1987; Nelson, 1976; Sodestrom & Martinson, 1987; Thompson, 1987). Patient self-disclosure has been proposed, but not tested, as another important variable in spiritual assessment (Crigger et al., 1984). All studies investigating these variables have been limited by the use of small convenience samples and often unestablished tools. Few have been replicated.

One factor which may affect nursing assessment of spiritual concerns may be a confusion between the psychosocial and the spiritual dimensions and the identification of spiritual concerns exclusively with religious practice. Data from at least three research projects confirmed this idea. In 1981, Highfield asked 17 registered nurse members of a state oncology nursing group to identify items on the 41-item Spiritual Health Inventory (SHI) as spiritual, psychosocial, or physical in nature. The Spiritual Health Inventory (SHI) contained 18 patient behaviors/feelings indicating spiritual health and 31 patient behaviors/feelings indicating spiritual problems. Spiritual health was defined as spiritual need
fulfillment, and spiritual problems were defined as lack of spiritual need fulfillment. Spiritual needs were identified as basic human needs for meaning and purpose in life, for giving and receiving love, and for hope and creativity.

When asked to classify each of the behaviors as physical, psychosocial, or spiritual, respondents identified with the spiritual dimension almost exclusively those items which contained religious cues, such as the word "God." The four items identified as spiritual which did not contain religious cues dealt with meaning and purpose, guilt, and confession, perhaps providing a further validation of the defining characteristics of the nursing diagnosis Spiritual Distress (Hurley, 1986). One item was identified with the physical dimension, and all other items were identified with the psychosocial dimension. These results were supported by findings in replication studies with 35 surgical nurses (Highfield & Cason, 1983), 45 community health nurses (Ford, 1987), and 41 hospital and hospice nurses (Schreiber, 1987) and suggested a limited awareness of the existential nature of the spiritual dimension.

A second factor that may affect assessment of patients' spiritual health and distress is the personal experience of the nurse (Britton, 1985). Nelson (1976) concluded that personal experiences were more important in affecting how one convenience sample of nurses dealt with spiritual concerns than was formal education. During her interviews of 27 nurses enrolled in graduate school,
Nelson found respondent answers to questions about how they personally might use God to cope with crises very similar to answers about the types of spiritual assessments they had made. Most respondents (74%) felt that their education had prepared them to some extent to address spiritual concerns, but responses to interview questions were reflections of personal, not scientific, convictions and values. While Nelson (1976) provided much qualitative data by classifying interview responses, only data frequencies were reported as results.

Davis (1980) later investigated a third factor which might affect spiritual assessment, the nurse's own religious attitudes. Davis distributed the Religious Attitude Inventory (RAI) and the Patient Spiritual Need Index (PSNI) to 1 male and 29 female Registered Nurses. Both inventories were composed of religiously-oriented items and did not directly address deeper existential needs. Davis' conclusion that assessment of spiritual concerns was affected by personal "religiosity" (p. 45) of the nurse was not substantiated by her work. She found only a slight positive correlation ($r = .38$) between RAI and PSNI scores and did not test the significance of the correlation. Further Davis reported no reliability or validity data for the RAI and the PSNI. Thus, the relationship between the personal convictions or experiences of nurses and spiritual assessment could not be confirmed.
Other authors have investigated additional factors which may affect nursing assessment of the spiritual dimension. Crigger et al. (1984) surveyed a convenience sample of 41 matched nurse-inpatient pairs (a) to determine whether nurses adequately assessed their patients' spiritual needs for meaning and purpose in life, for giving and receiving love, and for hope and creativity and (b) to determine the effect of level of education on assessment. By distributing parallel nursing assessment and patient self-report forms of the Spiritual Health Inventory (SHI) to respondents, the researchers hoped to overcome the limitations of previous studies by comparing nurses' assessments of patients directly with patients' self-reported spiritual health. Validity of the nursing assessment form of the SHI had been established through literature and expert panel review (Highfield, 1981; Highfield & Cason, 1983), but the patient self-report form of the SHI was untested. Reliability was not reported for either form.

Results indicated that level of education of the nurse was not related to nursing assessment of spiritual health, but the authors reported the anecdotal findings that length of practice may affect the way nurses assess the spiritual health and distress of patients. When Crigger et al. (1984) separately examined nurses' assessments of positive and negative indicators of spiritual health on the SHI separately, they found that nurse respondents accurately assessed positive behaviors of patients, but did not accurately assess negative
behaviors ($p<.05$). Crigger et al. (1984) suggested that the more accurate nursing assessment of positive SHI items may have been related to patient self-disclosure, since patients are more likely to disclose positive behaviors and feelings than their negative ones. Crigger et al. also reported that nurse respondents with less experience rated negative patient behaviors higher than did the patients, while nurses with more experience rated positive patient behaviors higher than did the patients ($p<.02$).

In contrast to Crigger et al. (1984), Thompson (1987) found no relationship between level of experience and nursing assessment of spiritual concerns as measured by the SHI. Further, Thompson found no relationship between spiritual well-being or spiritual care education of the nurse and assessments of the spiritual health of patients. Thompson distributed a demographic sheet, the Spiritual Well-Being Scale (SWB) (Ellison, 1983; Paloutzian & Ellison, 1979), and the Spiritual Health Inventory (SHI) to a convenience sample of 55 registered nurses working in telemetry, oncology, and surgical units in a 475-bed, non-profit hospital. The nursing assessment form of the SHI, which allows nurses to rank the level of spiritual health of their patients, was used to measure nursing sensitivity to patient spiritual concerns. Higher scores on the SHI indicate that the patient is more spiritually healthy, and lower scores indicate that the patient is spiritually distressed. The author assumed a high level of spiritual concerns among patients based on the acuity level
and crisis nature of patient illness in the hospital units where nurses were surveyed.

While no relationships among variables were significant, Thompson noted two interesting trends in the data. Nurses with more experience had higher SHI scores, perhaps indicating less sensitivity to spiritual concerns of patients, while nurses with more formal spiritual care training had lower SHI scores perhaps indicating higher sensitivity. Thompson (1987) suggested that sample size may have been inadequate to uncover significance in these trends. As in most other studies, nursing assessments were not validated with patients.

In addition to the cited studies on spiritual health assessment, Sodestrom and Martinson (1987) surveyed a convenience sample of 25 matched nurse-patient pairs to determine how accurately nurses were assessing the religious coping strategies of oncology patients. Since religion has been defined in this project as the values, beliefs, and practices used by individuals to meet spiritual needs, any assessment of religious coping strategies will reflect spiritual assessment abilities to some extent. Using a semi-structured interview schedule, Sodestrom and Martinson found that nurses more accurately identified religious activities of the patient when they reported knowing the patient as well or better than other patients (p < .05). Assessment of religious coping strategies by nurses was not related to the "nurses' religion, church attendance,...experience with
cancer,...years of experience, self-appraisal of their ability to assess spiritual needs, time worked with their study patients,...hours of spiritual instruction," (p. 44) or the sex or religion of the patient.

The Spiritual Health of Persons With Cancer

A diagnosis of cancer creates a physical and spiritual crisis in which spiritual needs may be acutely experienced by the patient. Previously unresolved conflicts, which may have contributed to the development of cancer, may exacerbate, and the client may question previously accepted values when confronted with the inevitability of death (Granstrom, 1985; McHugh, 1985). These fears, questions, and anxieties have been called existential (Weisman & Worden, 1976) or spiritual distress (Clinebell, 1966, 1979; Highfield, 1981; Highfield & Cason, 1983; Hirano, 1978).

A patient may deal with these spiritual concerns by withdrawing from the situation or by confronting reality. Confronting reality results in resolution of distress and perhaps in increased spiritual health. In Weisman and Worden's (1976) study of 120 persons with lung, colon, breast cancer, Hodgkin's disease, and malignant melanoma, those patients able to confront their illness were "hopeful, realistic, and trusting. They coped better, had fewer problems with better resolution, more support, and less sickness" (p. 8). Persons exhibiting these behaviors are spiritually healthy (Fish & Shelly, 1988; Highfield, 1981).
In assessing spiritual health, nurses must include in their assessment any factors affecting the person's ability to cope with the distress accompanying the diagnosis of cancer. Weisman and Worden (1976) identified several variables affecting the level of existential distress experienced by the individual who is confronted with a diagnosis of cancer. While some of these variables can be affected by nursing action and some cannot, all can be helpful in identifying patients at risk for high levels of existential or spiritual distress. Variables not amenable to nursing action included patient age, basic personality, indecision in seeking initial treatment, and primary site and stage of the tumor. The effects of each are discussed in turn.

First, older patients were able to speak of death more realistically than younger patients who anticipated that the disease would interrupt future plans for work, marriage, and so forth. Slaughter's (1979) finding that age was positively correlated with the nature ($p < .01$) and importance ($p < .05$) of spiritual needs ($N = 13$) and Reed's (1986) documentation of the increased expression of religious issues among terminally ill respondents ($n = 57$) ($p < .001$) provide confirmation that older individuals are more prepared to discuss and deal with spiritual concerns.

Second, patients who were indecisive in seeking initial diagnosis and treatment for cancer were at risk for more existential concerns, and third, patients with a generally pessimistic and
inflexible outlook on life had more difficulty than those who were open and optimistic. Because delay in seeking treatment for breast cancer has been positively correlated with disease stage (p < .05) (N = 129) (Funch, 1984), the increase in existential concerns associated with delay may be related to the seriousness of patient disease at the time of diagnosis rather than to the delay itself. Weisman and Worden (1976) did not find delay alone significant.

The primary tumor site was another factor affecting the amount of existential distress of patients. Persons with lung cancer experienced the most severe reactions. The researchers suggested this predisposition might occur because patients with a primary lung tumor generally had poorer prognoses and did not respond as well to treatment as individuals with other primary sites. The work, health, and existential concerns of individuals with lung cancer rose during the first 100 days. In contrast, the distress of persons with breast cancer and Hodgkin's disease peaked during the second month after initiation of treatment, possibly related to severe treatment toxicities, and those persons with colon cancer and malignant melanoma showed the least distress of any group, perhaps because usual treatment involved surgical excision (Weisman & Worden, 1976).

Other variables affecting the ability of persons to confront the diagnosis of cancer are potentially responsive to nursing action. These variables include patient regrets about past events, ability to
cope with diagnosis at a given time, and the availability of support systems (Weisman & Worden, 1976). Many spiritual concerns are reflected among these variables: the need for forgiveness, for having a set of values which provide meaning in life, and for secure, trusting relationships with others and self (Clinebell, 1966, 1979; Fish & Shelly, 1988; Highfield, 1981; Highfield & Cason, 1983; Stallwood & Stoll, 1975).

Religiousness may be another factor that helps patients deal with the spiritual distress precipitated by a diagnosis of cancer. Religiousness may be defined as the individual's focus on a transcendent value system (i.e., religion) (Reed, 1986). Reed proposed that terminal illness may enhance movement into late life developmental stages and that religiousness is an available and important self-care strategy available to persons entering late life phases. During late life stages, individuals may place increased emphasis on integrating their life events into a meaningful whole, and a religious or transcendent value system can provide an appropriate integrating force.

To test her ideas, Reed (1986) distributed the Spiritual Perspectives Scale (SPS), a 10-item Likert-type scale measuring "the extent to which persons hold...religious beliefs and engage in religiously oriented interactions with others and with God" (p. 37), and the Index of Well-Being (IWB), a 9-item, Likert-type scale measuring life satisfaction and quality of life, to a convenience
sample of 57 terminally-ill cancer patients and 57 matched, healthy individuals. Subjects were matched by age, gender, education, and religious affiliation. The hypothesis that terminally ill patients would express more religiousness than their healthy counterparts was supported ($p < .001$), with female patients expressing the most religiousness.

While oncology patients' disclosures related to religious beliefs and practices may be positive (Reed, 1986), they may also be negative expressions of distress. Among cancer patients seen for psychiatric consultation 32 of 50 expressed concerns related to religion, including concerns about the meaning of suffering and illness, difficulty reconciling their illness with religious views, "loss of religious support,...pressure...to adopt a [different] religious position,...[and] idiosyncratic or bizarre expressions of unusual religious beliefs" (Peteet, 1985, p. 57). Thirteen (25%) patients volunteered information about these concerns, and none objected to questions about their beliefs.

Since patients in this study were seen for assistance in coping with their illness rather than for major psychiatric illness, Peteet concluded that religious issues are common and important among the mentally healthy oncology population. The author recommended that health care professionals should sensitively pursue religious concerns of patients in a way that communicates concern about the whole person and individual resources for coping. "Many patients [he
noted] may be interested in discussing the religious aspect of their experience but few members of the hospital staff are interested in asking them about [it]" (p. 60).

Despite the desire of many oncology patients to talk about their religious or spiritual concerns, both nurses and physicians have blocked communication. In an early exploratory study, Quint (1965) found that time spent with persons who had cancer was limited to the accomplishment of various tasks. When patients (N = 21) attempted to voice concerns, the nursing staff avoided these by "focusing directly on either the diagnosis or the prognosis,...referring the patient to the physician, changing the subject, lapsing into silence, or making such statements as 'We all have to go some time'" (p. 122-123). Patients who did not increase the anxiety of the nurses were rewarded with more nursing attention for nonexpression of feelings. Such nursing reactions clearly interfere with listening and thus, with spiritual health assessment.

If, on the other hand, the nurse can listen to oncology patients, who raise questions about "meaning and purpose in life, illness, loss, aging, suffering, limitations, and death" (Granstrom, 1985, p. 44), the nurse will be able to assess spiritual health. Nurses, psychiatrists, and counsellors have suggested that the nurse take an active role in listening to patients' concerns including the religious and spiritual ones (Fish & Shelly, 1988; Granstrom, 1985; Jourard,
Further, a growing number of cancer survivors have become advocates for other cancer patients and have demanded that legislators and health care workers face their psychosocial, spiritual, and occupational concerns, as well as their physical concerns (Kelly, 1975; Kushner, 1984; Rollin, 1976). In a 1976 survey of a convenience sample of 100 nurses, respondents agreed with patient advocates that the ideal oncology nurse is one who can deal with the reality of patient diagnoses and listen to patients in their distress (Morrow, Craytor, Brown, and Fass, 1976).

Summary

Few nurse researchers have addressed the spiritual health and distress of patients or the accuracy of nursing assessment of spiritual health. Those projects which have been completed lack generalizability because of convenience sampling, lack of replication, often untested instruments, and sometimes poor conceptual grounding. Four recurrent themes, however, support the need for further investigation. These themes are that: (a) spiritual needs include both religious and existential concerns, (b) characteristics of the nurse may affect spiritual assessment, (c) characteristics of the patient may affect reporting of spiritual health, and (d) oncology patients experience spiritual concerns.
CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The purpose of this study was to investigate the spiritual health of oncology patients. The specific problems investigated were: (a) does nurse-assessed spiritual health of oncology patients differ from oncology patients' self-reported spiritual health and (b) what factors are related to the spiritual health of oncology patients and the spiritual health assessments made by nurses? Patients were asked to give a self-report of their own spiritual health, and nurses were asked to assess the spiritual health of these same patients; spiritual health scores of matched nurse-patient pairs were then compared. Also multiple demographic and disease-related variables were correlated with patient self-reported and nurse assessed spiritual health scores in order to determine their effect on spiritual health and its assessment.

A descriptive, cross-sectional survey was used to answer 11 research questions. A descriptive design was chosen for two reasons: (a) inadequate research was available to predict relationships among variables and (b) the independent variables could not be manipulated (Brink & Wood, 1983). A cross-sectional
design provided a "snapshot" (Abdellah & Levine, 1979, p. 224) in time appropriate for a descriptive study. The cross-sectional design was based on the assumption that a certain amount of natural "randomization" of subjects would occur due to chance distribution (Abdellah & Levine, 1979).

Setting

This study was conducted within two religiously-affiliated, private, nonprofit hospitals located in a large metropolitan area in the southwestern United States. The hospitals were located in and near a major medical center serving a local, national, and international oncology patient population. A convenience sample of patients diagnosed with primary lung cancer and their nurses were recruited from two oncology units, three general medicine units, and one surgical unit.

Population and Sample

The target population was oncology inpatients and their nurses in two large, private, nonprofit hospitals in and near a metropolitan medical center. A cross-sectional, convenience sample of 23 patients with primary lung cancer and 27 Registered Nurses, including 21 matched nurse-inpatient pairs, was recruited, and so results were not generalizable to the target population. Despite this limitation, the findings of this study may lead to future replication, the formulation of hypotheses, and further research (Abdellah &
Levine, 1979). Inpatients were selected for two reasons: ongoing daily contact with nurses and assumed need for diagnostic workup or more acute care. The first factor increases potential nurse-patient contact, while the second factor may be related to an increase in existential anxiety (Weisman, 1979).

Individual subjects were selected using convenience sampling. Convenience sampling was appropriate for several reasons. First, convenience sampling facilitated obtaining the number of subjects required for the data analysis procedures, and secondly, convenience sampling required less cost per subject. Disadvantages of convenience sampling were the lack of control over unrecognized, potentially important, systematic or random subject characteristics; therefore, sampling and measurement errors could not be computed. Convenience sampling also may have resulted in an atypical sample of subjects, but this risk was partly controlled by analysis of multiple nurse and patient characteristics as independent variables and by limiting eligibility for participation (Abdellah & Levine, 1979).

In order to obtain the sample, all Registered Nurses on the involved hospital units were contacted through brief group meetings conducted on each shift and each unit. During these meetings the purposes and procedures of the study were explained, and nurses were asked to indicate to the researcher if they were interested in participating in the study. Nurses were also asked to identify
physicians who frequently admitted persons with lung cancer to their floors.

The researcher then contacted the named physicians by letter requesting permission to contact any lung cancer patients admitted to the hospital under their care. Each physician was asked to sign and return an enclosed permission letter to the researcher. Some physicians signed and returned the letter, but several did not respond. One oncologist requested that the investigator call his office for approval of each identified potential subject prior to contacting that patient.

During the following seven months, the researcher daily reviewed the nursing care plan kardexes to identify patients with primary lung tumors, who spoke English as a primary language. When a patient meeting study criteria was identified, the researcher checked with that patient's nurse to verify whether the patient was oriented and physically able to respond to a questionnaire. If the patient's physician had not returned a permission letter to the researcher, the patient's chart was flagged with a letter briefly explaining the project and requesting written physician approval. If necessary, the physician's office was called for verbal approval. After physician permission was granted, the investigator contacted the involved patient. If the physician had granted prior approval to access patients, the researcher contacted the identified respondent immediately and explained purposes and procedures of the study to
the patient and family members if present. If the person refused to participate in the study, no further contact was made; but, if that individual expressed interest in the project, the investigator left copies of the SHI, demographic sheet, cover letter, and return envelope with the patient and with a Registered Nurse caring for that patient on one shift during the previous 24 hours.

Protection of Human Subjects

After approval by the Texas Woman's University Human Subjects Review Board (see Appendix C), official nursing representatives from each hospital, and one hospital's Human Subjects Review Board (see Appendix D), subjects were asked to participate in the project. Prior to participation each patient and nurse dyad was informed both verbally and in writing about the purpose of the study, risks and benefits, and confidentiality. Subjects were told that completion of the questionnaire constituted consent to participate, and this information was printed in large letters at the top of the SHI and cover letter. Potential respondents were also informed of any alternative procedures, questionnaire completion time, and how to obtain study results. A statement that participation was voluntary and that participants might withdraw at any time during the study was also included. The importance of completing the demographic data sheet was stressed, and an explicit statement was included that information provided by respondents would be used to describe only the group of subjects who responded and would not be used to
identify any individuals. Finally subjects were told that although no harm was anticipated as a result of participation in the study, no compensation would be provided by Texas Woman's University, the hospital, or the college of medicine affiliated with one of the hospitals. Potential respondents were told, however, that hospital emergency medical care would be available to them as it is to other members of the community. (See Appendix E for cover letters.)

Instrument

Two investigator-designed instruments were used to collect data--a nurse questionnaire and a patient questionnaire. Each questionnaire was composed of a Personal Data Sheet (PDS) and a nurse or patient form of the Spiritual Health Inventory (SHI). The nurse PDS was designed to obtain demographic professional and personal information from nurse respondents, and the nurse SHI was designed to assess the spiritual health of patients (see Appendix F). The patient PDS was used to obtain demographic personal and health-related information from the patient, and the patient SHI was for self-reporting of spiritual health (see Appendix G).

Personal Data Sheets

Items on both nurse and patient Personal Data Sheets (PDS) were designed to obtain data about selected demographic variables. The patient PDS was composed of nine checklist and short answer items including patient age, sex, marital status, ethnic background,
highest completed level of education, intensity of symptoms, religious preference, frequency of attendance at religious functions, and occupation. The nurse PDS was a nine item checklist and short answer form designed to obtain information on nurse age, sex, ethnic background, highest level of completed education, total years of practice, number of shifts they had cared for the patient in question, religious preference, attendance at a class on spiritual care, and frequency of attendance at religious functions. The relationship of these variables to the spiritual health of patients or to nursing assessment of the spiritual health of patients has not been identified (Byrne & Price, 1979; Crigger et al., 1984; Fish & Shelly, 1988; Martin et al., 1976; Nelson, 1976; Peteet, 1985; Quint, 1965; Reed, 1986; Sodestrom & Martinson, 1987; Thompson, 1987; Weisman, 1979; Weisman & Worden, 1976).

**Spiritual Health Inventory**

The second part of the questionnaire, the Spiritual Health Inventory (SHI), consisted of 32 items. Thirty one (31) of these items were patient behaviors or feelings presented in a Likert-type format. Participants were asked to rank each of these items on a one to five scale indicating frequency of occurrence. A rank of five indicated the behavior or feeling occurred frequently, and a rank of one, infrequently. Each item was either a positive or negative indicator of spiritual health. On the patient self-report form 17 items were positive and 14 items were negative measures while on
the nursing assessment form 7 items were positive and 24 items
were negative. The imbalance in positive and negative items
resulted from factor analyses of previous versions of SHI forms.

A single spiritual health score was calculated for each SHI by
reversing recorded frequencies of negative measures, then summing
all frequencies. Scoring was normative and provided ordinal level
data; higher scores indicated higher levels of spiritual health and
lower scores indicated lower levels of spiritual health (i.e.,
spiritual distress). Item 32 on the SHI asked all respondents to rank
hospital chaplain, family member or close friend, nurse, personal
clergyman, physician, psychiatrist or psychologist, social worker, or
specified "other" from most preferred to least preferred spiritual
caregiver.

Content and construct validity of the SHI were based on
literature review, expert panel input, and factor analyses.
Development of the tool was begun with a review of pastoral and
nursing literature, during which 59 patient behaviors believed to
represent either spiritual health or spiritual distress were
identified. These behaviors were randomized and submitted to an
expert panel of ministers and counselors. The panel was given
definitions of four spiritual needs (i.e., for meaning and purpose in
life, for trusting relationships with others/God, for giving love, and
for hope and creativity) and were asked to identify each behavior
with one of the spiritual needs. If two of the three panel members
agreed on classification of a behavior, the item was retained. The 49 accepted items representing four spiritual needs were again randomized, placed on a Likert-type scale, and distributed to three practicing nurses who made further comments regarding the general understandability of the items and tool (Highfield, 1981).

The nursing assessment form of the SHI was then administered to three convenience samples--once to members of a state oncology nurses group (N = 17) (Highfield, 1981), once to general surgical floor nurses who worked with oncology patients (N = 35) (Highfield & Cason, 1983), and once to medical/surgical nurses in a secondary care setting (N = 41) (Crigger et al., 1984). All studies were designed to identify nursing awareness of the spiritual concerns of patients.

Reliability and construct validity on the 49-item nursing assessment SHI was established using data from the first two studies (N = 52). Data from the 1984 study by Crigger et al. were omitted because a shortened form of the SHI was used. A single unidimensional score was calculated for each 49-item SHI, and raw scores varied from 116 to 208 with a range of 92, a median score of 150, and a mode of 150. Possible score variation was from 49 to 245 with a possible range of 196. Cronbach's alpha for the total test was $r = .76$. Eight items with negative point biserials were dropped and a factor analysis was completed on the remaining 41 items. Three factors, representing three areas of spiritual health,
were identified. The 20 items representing these three factors had an overall Cronbach's alpha of $r = .88$ and item point biserials varying from $r = .30$ to $r = .66$.

Twelve (12) items from the original 49-item SHI were revised and added to the 20-item, 3-factor instrument, bringing the total number of items to 32. Revised items were those which had point biserial values varying from $r = .11$ to $r = .27$. Revisions were completed in order to increase the point biserial values of these items. Also one factor had only two items, and some revised items were expected to contribute to that factor.

Following development of this 32-item nursing assessment form of the SHI, a parallel 32-item patient self-report form of the SHI was designed. A patient item was written to correspond in content with each item on the nurse SHI. When possible the same item wording was used and the only change was from third to first person. Sometimes additional changes in item wording were required because some items, such as "Talks about condition realistically" and "Exhibits overly dependent behaviors," were highly socially desirable or undesirable. Additionally, some items were rewritten for the patient SHI as patient feelings, since nursing items were written as behaviors that the nurse could observe. The first 32 items on nurse and patient instruments were then randomized using a table of random numbers.
The nursing assessment SHI and the patient self-report SHI were then piloted with 12 matched nurse-patient pairs on an inpatient oncology unit in a private, nonprofit hospital. Reliability statistics were calculated for both nurse (n = 9) and patient (n = 8) Inventories (N = 17). Nursing SHI point biserial statistics varied from r = -.20 to r = .92 with Chronbach's alpha for the total test at r = .92. Point biserial statistics of eight revised items varied from r = .31 to r = .78, and these remained as part of the SHI. Two revised items, had point biserials less than r = .30 and were dropped. Two additional items which had high point biserials in earlier reliability testing (N = 52) were retained in the final factor analysis even though point biserials were less than r = .30 during this analysis of pilot data. The resulting nursing Spiritual Health Inventory (SHI) contained 30 items. The patient SHI item point biserial values from the pilot study varied from r = -.33 to r = .96 with a Chronbach's alpha for the total patient SHI of r = .89. Four patient items had negative point biserial statistics and were dropped.

Factor analyses of pilot study data on nurse and patient Inventories were also completed. Three factors were identified which accounted for 71.3% of variance on the nursing tool and 71.5% of variance on the patient tool. These three factors were the same three factors identified in the first testing of the nursing tool: (a) the need for self-acceptance; (b) the need for nonconditional,
trusting, forgiving relationships with others and/or a supreme being; and (c) the need for hope.

Factor analyses resulted in a 21-item patient SHI and a 28-item nursing SHI. Since the final form of the nursing SHI contained 28 items, seven items were written for the patient SHI in order to bring its items to 28. New items included five positive and 2 negative indicators of spiritual health. Four of the new patient items were related to factor two, and three were related to factor three. Items for each SHI were then randomized using a table of random numbers.

During factor analyses some patient items were not grouped with the same factor as the nursing item intended to be parallel in content. One explanation for this difference in grouping of individual items might be that the necessary wording changes in nurse and patient items may have resulted in items not truly parallel in content. Another explanation might be the interrelatedness of the three spiritual needs, resulting in the overlapping behaviors representing each spiritual need (Clinebell, 1966). A third explanation might be that this factor analysis was based on small groups of nurses ($n = 9$) and patients ($n = 8$), and that analyses with larger groups might result in more consistent separation of items.

As a final step the 28-item forms of patient and nurse Inventories were distributed to two nurses and three non-patients
for feedback on tool understandability. One non-patient identified the presence of double-barrelled items on the patient SHI, such as "I believe other people or God accept me despite some past actions." When double barrelled items on both nurse and patient SHI forms were separated, the final forms of both Inventories contained 31 Likert-scale items plus the final item asking nurses and patients to rank spiritual care helpers.

Data Collection

Over a seven month period the Spiritual Health Inventories (SHI) and Personal Data Sheets (PDS) were distributed to 40 matched pairs of oncology inpatients and their nurses (N = 80) from five units in one Protestant-affiliated hospital and one unit in a Catholic-affiliated hospital. Patients received a self-report form of the SHI (r = .77), and nurses received a parallel nursing assessment form (r = .89). Scores of each group were described separately and then compared; selected demographic variables from each group were correlated with their SHI scores. Additionally data were analyzed to determine whom patients identified as best able to help with their spiritual concerns, to whom nurses would most likely refer patients with such concerns, and whether nurses and patients differed in their choices of spiritual caregivers.

The investigator held brief group meetings with the professional Registered Nurses on the units to which persons with lung cancer might be admitted. Refreshments were provided by the
researcher for those attending. Units included three general medical units, one surgical unit, and two oncology units. At these meetings the information contained in the cover letter was presented to those in attendance, including the purpose and procedures of the project. The investigator informed attendees that persons with lung cancer would be identified from the nursing care plan kardex, and that after physician approval those persons would be asked to participate in the study. Nurses were told that once a patient agreed to participate the nurse would be given that patient's name, a PDS, and a nursing assessment form of the SHI to complete and return by mail in an attached stamped envelope. All potential nurse subjects were requested to complete the forms as soon as possible, and not to use the form as an interview tool since the patient would be completing a self-report form. Nurses were also assured that they were not required to complete the questionnaire during their on-duty time, that participation was voluntary, and that their participation in the study would involve completing only one questionnaire on one patient. The investigator answered questions during these meetings and asked attendees to indicate at this time whether or not they thought they would be interested in participating. No further contact was made with any nurse who indicated a desire not to participate.

After these group meetings patients diagnosed with primary lung cancer were identified from the nursing care plan kardex on
each of the floors. If the potential patient respondent met study criteria, the investigator contacted the patient and explained briefly the purpose and procedures of the study. If the patient expressed interest the investigator verbally outlined all material in the cover letter to the patient and offered to answer any questions. The cover letter contained information about the purpose of the study, consent, confidentiality, risks and benefits, alternative procedures, importance of demographic data, SHI completion time, and availability of results. If the patient did not want to participate, no further contact was made with that patient with four exceptions. Four patients, who indicated they did not want to participate at that time, requested that the investigator return and check with them later for interest in participation. Only one of these subjects ultimately did agree to participate.

If the patient agreed to participate, the investigator left with the patient a cover letter, a patient PDS, a self-report form of the SHI, and a stamped envelope for questionnaire return. The investigator also offered to return and pick up the questionnaire from patients if preferred, or indicated that the questionnaire in the sealed envelope might be given to the nursing staff for mailing. Each alternative way of returning the SHI was used by one or more patients. Four patients with impaired vision also elected to respond verbally to the questionnaire, requesting that the investigator read the questionnaire to them. Family member offers to complete the
questionnaire for the patient were refused with appropriate explanation.

Once a patient agreed verbally to participate, the investigator contacted a Registered Nurse who had previously granted verbal consent and who had cared for that patient on the current shift or some shift during the previous 24 hours. That nurse was given a nursing cover letter, a PDS, a nursing assessment form of the SHI, and a stamped envelope for questionnaire return. Each potential nurse respondent was verbally given the consenting patient's name and instructed to complete the SHI in terms of their current knowledge of that patient. Nurse respondents elected to return questionnaires three ways: directly to the investigator, through the mail, or in a sealed envelope on the unit bulletin board. These procedures were followed until 21 nurse-patient pairs were obtained.

Pilot Study

Pilot study findings indicated that the methodology and instrument were adequate to meet study objectives. Over a 3 week period the questionnaires were distributed to 12 matched oncology nurse-patient pairs (N = 24). These pairs included all except two of the day and evening shift professional nurses. Nurses and patients were encouraged to complete the SHI as close to the time they received it as possible.
Eight oncology patients and nine nurses returned the questionnaire. These 17 respondents included 8 matched nurse inpatient pairs. The patient sample was composed of three males and five females diagnosed with various types of primary tumors. One patient reported no demographic information. All eight patients were married, non-hispanic Caucasians who lived with family. Four patients had college degrees, and the other four had at least a high school degree or GED equivalent. The mean patient age was 53 years. One patient was Jewish, while seven were either Catholic or Protestant.

The first research question addressed was, "What level of spiritual health is reported by oncology patients?" The nine patients who responded were moderately spiritually healthy. None of the patients exhibited extreme spiritual distress. Their SHI scores varied from 98 to 144 with a range of 46 and a mean of 122. Possible variation in scores was 32 to 160. The moderate to high level of spiritual health among these patients may be because their spiritual needs were adequately met on the hospital unit, or because those patients with more spiritual distress chose not to participate.

In response to the second question, whether there is a difference between the self-reported and nurse-assessed spiritual health of patients, the investigator found no significant difference between SHI scores of matched pairs ($p < .05$). These nurses seemed to be accurately assessing their patients.
Questions about the relationship between selected patient characteristics and the self-reported spiritual health of patients were answered by analyzing patient SHI scores in relation to each characteristic. No relationship was identified between the self-reported spiritual health of patients and religious affiliation, frequency of church attendance, sex, educational level, severity of symptoms, or time since diagnosis (p < .05). The patient sample did not contain enough heterogeneity to determine whether a relationship existed between the self-reported spiritual health of patients and patient ethnic background, marital status, living situation (i.e., whether they lived alone or with others), or tumor type.

The next questions related to whether or not selected characteristics of oncology nurses affected spiritual assessments of patients. Responses from the nine nurses completing the SHI indicated no significant relationships between assessment of spiritual health and nurse age, level of education, or years of practice (p < .05). Additionally, no relationships were identified between spiritual health assessment and nurse religious affiliation, frequency of church attendance, or attendance at spiritual care classes (p < .05). Again the sample was too homogeneous to determine the relationship between ethnic background or sex of these nurses and spiritual health assessment.
In determining whom oncology patients identified as the person(s) best able to help with their spiritual concerns, a calculation of frequencies and percentages of helpers chosen indicated that most of these patients would rather talk with a family member or close friend. The second, third, and fourth choices of the eight patient respondents were physician, personal pastor, and nurse respectively. One patient indicated that another patient with the same disease would be a preferred helper.

In response to the question to whom would nurses refer their patients for spiritual assistance, the nurses in this survey were divided. The patient's personal pastor, the physician, and the psychotherapist were each selected as a first referral choice by 25% of nurse respondents. Three-fourths (75%) of the nurses indicated that the personal pastor of the patient was either their first or second choice. Over half (63%) of the nurses ranked themselves as either a third or fourth choice. One nurse felt that another patient might be of help in discussing spiritual concerns.

This project served as a small-scale pilot for the larger dissertation study described in this paper. Because of the sampling procedure and sample size, the pilot study was not expected to provide valid answers to the research questions, but did serve to validate the appropriateness of study design, to assist with SHI and PDS revisions, and to make recommendations for replication with a larger group of matched nurse-patient pairs.
One major recommendation resulting from the pilot project was the addition of three research questions. The first was: Is there a difference between the spiritual caregivers selected by oncology patients and those selected for them by their nurses? The need to ask this question was stimulated by inspection of patient and nurse ranking of potential helpers and a lack of available research data on this subject (Sodestrom & Martinson, 1987). Two other research questions were also suggested by data inspection and Sodestrom and Martinson's (1987) investigation of the effects of patient characteristics on nursing assessment of religious coping strategies: (a) What is the relationship between patient age or intensity of symptoms, and the level of spiritual health attributed to oncology patients by their nurses and (b) Is there a difference in the level of spiritual health attributed to oncology patients by their nurses based on the patients' sex or religious preference?

A second recommendation was that nurses should not be allowed to choose the patient subject with whom they would be matched. In the pilot study nurses were permitted to select the patient who would complete the SHI and PDS. Researcher selection of patients was planned for the dissertation project since nurses might pick patients they like or know well resulting in findings which do not reflect the assessment abilities of the nurse. Future nurse respondents should be assured that the number of days they cared for the patient will be taken into account during data
analyses, which may increase their comfort in completing the SHI on patients whom they feel they do not know well.

The third recommendation was to encourage nurses to complete the SHI as soon as possible after receiving it. During the pilot study a time lag of up to two weeks occurred between the time some nurses received and completed the SHI. Such time lags may result in either completing the SHI based on nurse recall from an earlier patient contact, or deliberate or inadvertent use of the SHI as a guideline for patient assessment. The first possibility might result in random errors and the second, in systematic ones. In order to assure immediate nursing completion of the SHI, efforts were made during the dissertation project to encourage head nurse cooperation in providing nurses with the 15 minutes required to complete the SHI. This recommendation was dropped, however, because it was considered unrealistic by head nurses and staff involved in the dissertation project.

Two additional recommendations were to continue frequent researcher presence on the unit and to provide some compensation for nurses who participate. The return of two nursing SHI's directly to the researcher during the pilot project increased return rate and was possible because of time spent on the unit. During data collection for the dissertation project the researcher was on the involved units almost daily, and some questionnaires were again returned directly to the investigator.
Compensation to nurses for participating in the pilot project consisted of an initial group meeting with refreshments, a meeting with staff to report study results, and a letter of appreciation sent to each nurse who verbally agreed to participate in the study whether or not that nurse actually returned the SHI and PDS forms. A letter was also sent to the oncology nurse clinician, who made many valuable suggestions and facilitated communication with staff. Copies of these letters were sent to the nursing supervisor so the staff could receive credit for participating in the research. The initial group meetings with the staff were particularly helpful, and refreshments provided by the researcher contributed toward a relaxed atmosphere for discussion of the purpose and procedures of the survey. A similar meeting with refreshments was held with potential nurse participants in the dissertation project, and again a thank-you letter was sent to each nurse who received a questionnaire regardless of whether or not the nurse returned the SHI. Also a report of study results was planned. No compensation was provided for patient subjects other than the potential benefits listed in the cover letter, namely a better understanding of personal feelings and needs and a knowledge that one has contributed toward improved patient care.

Three changes in the nurse and patient Personal Data Sheets were also recommended based on pilot study findings. Nurse subjects noted that it was not clear whether the question relating
to years of practice meant total years of practice in nursing, in oncology nursing, or in the current institution. The original intent was total years of nursing practice, and this item was changed for the dissertation study to, "Total years of nursing practice."

Following the pilot study another question designed to elicit the number of days the nurse subject had taken care of the patient subject was added to the nurse PDS. Sodestrom and Martinson (1987) found no relationship between time spent caring for the patient and nursing assessment of religious coping strategies, but they did find that nurses who reported knowing their matched patient well performed more accurate assessments. They used a small convenience sample, and it is not clear whether time caring for the patient has a relationship to nursing assessment of spiritual health. It was hoped also that addition of this question would help nurses feel more comfortable in completing an SHI on any patient under their care.

The patient PDS was also modified based on pilot results. The question asking the patient to report tumor type was eliminated, since patient responses were difficult to translate into medical diagnoses. Patient respondents in the dissertation sample were limited to those with primary lung cancer in order to control the variable of tumor site and to elicit data from those patients most likely to experience existential distress (Weisman & Worden, 1976).
The final recommendation resulting from the pilot study was to change the question asking respondents to rank potential spiritual care helpers. Since this ranking was completed incorrectly on 3 of 17 returned forms, the problem may be that the instructions were either not clearly stated or not positioned in an obvious place on the page. Therefore, the directions were moved lower on the page, and the questionnaire was distributed to two nurses and three non-patients to complete and make comments on clarity. All five of these respondents completed this section correctly.

Length of the SHI was considered appropriate based on completion time of the SHI during the pilot project. Four patients reported completion times varying from 15 to 25 minutes, and five nurses reported times varying from 10 to 25 minutes with ranges of 10 and 15 minutes respectively. The mean completion time of the patient SHI was 18.5 minutes and the mean completion time of the nurse SHI was 14 minutes. For combined groups the mean was 14 minutes with a mode of 15 minutes. Pilot project data also provided additional instrument reliability and validity data as presented earlier in this chapter. This data resulted in the current 31-item form of both nurse and patient Inventories.

Treatment of Data

Parametric and nonparametric tests were used to describe nurse and patient groups and to answer the research questions. Parametric statistical tests were used for interval or ratio level
data, and nonparametric tests were used for ordinal or nominal level
data (Roscoe, 1975). The following ratio level demographic
independent variables: age, number of days the nurse has cared for
the patient, frequency of attendance at religious functions, and
years of nursing practice were described using parametric tests.
Selected parametric testing was also used for analysis of SHI
scores because of prior reliability and validity testing of the SHI.
Nonparametric tests were used for description and analysis of the
ordinal level SHI scores and to describe nominal and ordinal level
demographic independent variables. Nominal independent variables
included sex, ethnic background, religious preference, and nurse
participation in a spiritual care course. Ordinal independent
variables included symptom intensity and highest educational degree
completed. Level of significance for all inferential tests was set at
\( p < .05 \) because of the descriptive nature of the study (Roscoe, 1975).

First, descriptive statistics were used to depict
characteristics of nurse and patient groups. Frequencies were
calculated for all demographic variables. Median, mode, mean,
standard deviation, range, and percentages were calculated for age,
number of days the nurse cared for the patient, frequency of
attendance at religious functions, and nurses' years of practice.
Modes, frequencies, and percentages were calculated for ethnic
background, sex, marital status, level of education, intensity of
symptoms, religious preference, and attendance at a spiritual care course.

Next the research questions were addressed. The spiritual health reported by oncology patients (Question 1) was determined by calculating frequencies and the range, mean, median, and mode of patient SHI scores, and by constructing a 99% confidence interval. Question 2, whether nurse-assessed and patient self-reported spiritual health differed, was answered by comparing SHI scores of matched nurse-patient pairs using the Wilcoxon test for matched pairs and the Spearman correlation coefficient. Additionally, nurse SHI scores were examined using frequencies and range, mean, median, mode and a 99% confidence interval.

The investigator used nonparametric inferential statistics to answer Questions 3 and 4, what are the relationships between selected patient demographic and self-reported spiritual health, and are there differences in self-reported spiritual health of patients based on selected demographic variables. Additionally, nonparametric inferential statistics were used to answer Questions 5 and 6, what are the relationships between selected demographic variables and nursing assessment of the spiritual health of oncology patients and are there differences in nurse-assessed spiritual health based on selected demographic variables. The Spearman rank correlation coefficient was used to determine the correlation of age and frequency of religious function attendance with SHI scores of
each group; this test was also used to determine the relationship between independent variables of nursing years of practice, level of education, the number of days the nurse cared for the patient and the dependent variable of nurse SHI scores. The relationship between independent variables of patient religious preference and intensity of symptoms and the dependent variable of patient SHI scores was determined using the Kruskal-Wallis test as a nonparametric alternative to analysis of variance (Roscoe, 1975). The relationship between intensity of symptoms and patient SHI scores was also examined using the Spearman rank correlation coefficient. Similarly the Kruskal-Wallis statistic was used to determine any effect of nurse ethnic background, level of education, and religious preference on nurse SHI scores. The relationship between respondent sex and both patient and nurse SHI scores was determined by dividing each of these groups according to sex and then performing the Mann-Whitney U as a nonparametric alternative to the t-test for independent groups. Likewise the relationship between nurses’ attendance at a spiritual care course and their assessment of the spiritual health of their patients was determined by dividing nurses into two groups on the basis of whether or not they had attended such a course, and then performing the Mann-Whitney U test (Roscoe, 1975).

Similar data analyses were used to respond to Questions 7 and 8, what are the relationships between selected patient demographic
and disease-related variables and the nursing assessment of the patients' spiritual health (i.e., nurse SHI scores) and are there differences in nurse-assessed spiritual health based on selected patient demographic variables. The Spearman rank correlation coefficient was used to determine the relationship between independent variables of patient age and the dependent variable of nurse SHI scores. The relationships between patient religious preference or intensity of symptoms and nurse SHI scores were tested using the Kruskal-Wallis test, and the relationship between patient sex and nurse SHI scores was determined by dividing nurse SHI scores into two groups according to sex of the matched patient, and then completing the Mann-Whitney U.

Nonparametric data analyses were also used to answer Questions 9 and 10, whom do patients identify as best able to help with their spiritual concerns and to whom would nurses refer patients with spiritual concerns. The mode, frequencies, and percentages of subjects identifying each potential helper were calculated. The chi-square goodness-of-fit test was used to determine whether nurse and patient rankings of each spiritual caregiver were significant compared with a hypothesized frequency distribution within, not between, the nurses as a group and the patients as a group. Question 11, "Is there a difference between spiritual care helpers preferred by oncology patients and those
selected for them by their nurses?" was examined by comparing frequencies and percentages of selected helpers.

Summary

This descriptive cross-sectional survey was designed to identify: (a) whether there was a difference between nurse-assessed and patient self-reported spiritual health among oncology inpatients and (b) what demographic and disease-related variables were related to the self-reported and nurse-assessed spiritual health of oncology inpatients. Parallel nurse and patient forms of the Spiritual Health Inventory (SHI) and Personal Data Sheet (PDS) were distributed to 40 matched nurse-patient pairs in two private, nonprofit hospitals. Nonparametric and parametric descriptive and inferential statistics were used to respond to 11 research questions.
CHAPTER 4

ANALYSIS OF DATA

The purpose of this study was to describe the spiritual needs of oncology patients and the congruency of oncology nurses' assessment with patient identified needs. Two problems were addressed: (a) Does the nurse-assessed spiritual health of oncology patients differ from the self-reported spiritual health of oncology patients? and (b) What factors are related to the self-reported spiritual health of oncology patients and the spiritual health assessments made by nurses?

To address these problems demographic data sheets and parallel forms of the Spiritual Health Inventory (SHI) were distributed to 40 nurse-inpatient pairs \( n = 80 \) in two religiously-affiliated, nonprofit hospitals. Fifty (62.5\%) individual questionnaires, including twenty one paired nurse-patient SHI's, were returned via United States mail or directly to the investigator. Two nurses did not complete the demographic data sheet, but returned completed SHI's. Data from all 50 questionnaires were used for analyses. Only data from the 21 paired questionnaires were used to determine whether nurse-
assessed spiritual health of oncology patients differed from the self-reported spiritual health of patients and to determine the relationship between selected patient characteristics and nurse-assessed spiritual health.

This chapter includes a description of the sample and reports findings related to 11 research questions. Both parametric and nonparametric tests were used. Parametric tests were used to describe ratio level demographic independent variables, and both parametric and nonparametric tests were used to describe and analyze ordinal level SHI Scores and to respond to research questions. Nonparametric statistics alone were used to describe nominal and ordinal level demographic independent variables. Additionally, because of the descriptive nature of this project, the level of significance for all inferential analyses was $p < .05$.

Description of Sample

Respondents included 23 patients with primary lung cancer and 27 Registered Nurses. Forty-two (84%) of these fifty respondents comprised twenty-one matched nurse-inpatient pairs. Pairs were matched only on the basis of patient assignment, with each pair composed of a patient and a Registered Nurse caring for the patient. All patient subjects reported demographic data; two nurse respondents did not.
Patient respondents (n = 23) were older than nurse (n = 25) respondents. Patient ages varied from 51 to 79 years with a range of 28, while nurse ages varied from 24 to 52 years with a range of 28 years. An almost normal distribution was reflected by a mean patient age of 62.7 years, a median of 63 years, and a mode of 62 years. The standard deviation for patient age was 7.3 years. Nurse ages also reflected an almost normal distribution with a mean of 36 and a mode and median of 37. The standard deviation for nurse age was 7.85 years.

Patient and nurse groups were also dissimilar in sex and ethnic background. Patient subjects were predominantly male, while nurse subjects were predominantly female. Sixteen male (69.5%) and seven female (30.5%) patients responded, and two male (7.4%) and twenty five female (92.6%) nurses responded. Almost all patient respondents (91.3%) were Caucasian with one Hispanic (4.3%) and one Afro-American (4.3%) respondent. In contrast, the 26 nurses who responded to the question on ethnic background were predominantly from minority groups. Less than half were Caucasian (46.2%) with nine (34.6%) Asian nurses, four (15.4%) Afro-American nurses, and one (4%) "Black West Indian."

The educational preparation of nurse respondents was also varied with 10 (40%) diploma graduates, 5 (20%) associate degree graduates, and 10 (40%) baccalaureate graduates. The educational preparation of patients was generally less than that of the
nurses. Over half the patients (69.6%) did not have a college
degree and reported their highest grade achievement as
vocational training (n = 4), high school diploma or GED (n = 8), or
less than a high school diploma (n = 4). Four patients (17.4%),
however, had obtained a four year college degree, two (8.7%) held
masters degrees, and one (4.3%) was doctorally prepared.

More patients and nurses were Protestant than any other
religious affiliation. Thirteen (56.5%) patient subjects and
eleven (44%) nurse subjects were Protestant. Additionally, seven
patients (30.4%) and 9 nurses (36%) were Catholic. One patient
was Jewish (4.3%). Another patient (4.3%) and one nurse (4.2%)
claimed no religious affiliation, and one other patient (4.3%) and
four nurses (16.7%) claimed "other" as their religious affiliation.
Those patient and nurse respondents, checking "other" as a
religious preference, included one patient who identified his
religious preference as "Frinds" [sic], and four nurses who
identified themselves with "Orthodox," "United Christian,"
"Anglican," and "United Church" religions.

Patient subjects (n = 21) attended religious functions a mean
of 31.7 times per year with a standard deviation of 31.2 times.
The mode of patient (n = 4) and nurse (n = 5) attendance was once
a week, or 52 times a year, but the median of patient attendance
was 28 times per year, while the median of nurse attendance was
12 times per year. The mean number of times nurses attended
religious functions per year was 30.8 with a standard deviation of 47.5 times. Attendance among patients varied from never to twice a week, or 104 times per year, and attendance among nurses varied from never to four times a week, or 208 times per year.

Nineteen (82.6%) patient subjects were married, three (13%) were widowed, and one (4.3%) was divorced or separated. When asked for a subjective report on the intensity of physical symptoms, 10 patients (43.5%) reported feeling physically well most of the time, and 1 (4.3%) reported feeling well all of the time. A little over half (n = 12), however, reported feeling well only some of the time (30.4%), almost never (17.4%), or never (4.3%).

Nurse respondents had practiced for a mean of 10.9 years with a standard deviation of 8.8 years and a median of 10 years. Distribution of years of practice was bimodal with 1 year and 3 years as modes. Length of practice varied from 1 year to 30 years with a range of 29 years. Nurse respondents had cared for patient subjects for a mean of 5.6 days with a standard deviation of 7.7 days and a mode and median of 2 days. Length of time spent caring for patient subjects varied from 1 day to 32 days. Over half of the nurses (n = 14) (56%) had cared for the patient only 1 or 2 days. Additionally, a little less than a third of nurse
respondents \((n = 8)\) (32%) reported participating in a class on spiritual care during the previous year.

**Findings**

Parametric and nonparametric tests were used to answer the 11 research questions, and in this section of the paper the results of data analyses related to each question are reported. Responses of all participants \((N = 50)\) were used to answer 9 research questions. The questionnaires submitted by the 21 matched nurse-inpatient pairs were used to examine whether self-reported spiritual health differed from nurse-assessed spiritual health and to identify the relationship between selected patient variables and nursing assessments of spiritual health.

The first question, what level of spiritual health is reported by oncology patients, was determined by calculating frequencies, percentages, and the range, mean, median, and mode for patient Spiritual Health Inventory (SHI) scores \((n = 23)\). Patient SHI scores varied from 88 to 136 with a range of 48 (see Table 1), as compared to a possible variation in SHI scores from 31 to 155 with a range of 124. Their mean SHI score was 119.9 with a standard deviation of 12.1 and a standard error of the mean of 2.52. Using a 99% confidence interval the true mean was calculated as falling between 113.4 and 126.4. Only one person had a score below a hypothesized mean score of 93. Patients
demonstrated a median score of 121 and a mode of 115 ($\mu = 3$).
Since SHI scoring is normative, with higher scores indicating
greater spiritual health and lower scores indicating greater

<table>
<thead>
<tr>
<th>Score</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 - 94</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td>95 - 104</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>105 - 114</td>
<td>3</td>
<td>13.0</td>
</tr>
<tr>
<td>115 - 124</td>
<td>8</td>
<td>34.6</td>
</tr>
<tr>
<td>125 - 134</td>
<td>8</td>
<td>34.6</td>
</tr>
<tr>
<td>135 - 144</td>
<td>1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

spiritual distress, scores of this sample suggested that these patients had high levels of spiritual health.

In answer to the second question, does the self-reported spiritual health of oncology patients differ from the nurse-assessed spiritual health of those patients, the nurse SHI score distribution was described and the relationship of nurse and
patient SHI scores was tested. Nurse respondents rated patients as having levels of spiritual health higher than a hypothesized mean of 93 (see Table 2). Variation in nurse SHI scores was from 86 to 141 with a range of 55, a median of 122, a mean of 118, and a standard deviation of 15.9. Using a 99% confidence interval, the true mean was calculated as falling between 110 and 126. Standard error of the mean was 3.1. Additionally, no significant difference ($Z = -0.1680, p < .87$, two-tailed) or relationship ($r = -.2513, p < .14$) was found between the scores of the 21 matched nurse-patient pairs ($n = 42$) using a Wilcoxon signed-ranks test and a Spearman coefficient. For 12 pairs, nurse scores were higher than those of the paired patient, and for 8 pairs, patient scores were higher; scores of 1 pair were tied.

The relationship between nurse and patient SHI scores was then tested while controlling for the number of days the nurse had cared for the patient. Nurse-patient pairs were divided into three groups based on whether the nurse had cared for the patient one day or less ($n = 12$), two to four days ($n = 14$), or seven or more days ($n = 12$). Using the Spearman correlation coefficient, paired scores indicated the following: a negative, nonsignificant correlation between nurse-patient SHI scores when the nurse had cared for the patient one day or less ($r = -.66, p < .08$), a positive, nonsignificant correlation between nurse-patient scores when the nurse had cared for the patient two to four days ($r = .44, p < .08$), and
and a positive, nonsignificant correlation between scores when the nurse had cared for the patient seven or more days ($r = .09, p < .44$). Any similarity between SHI scores of matched nurses and patients, therefore, was attributed to chance.

### Table 2

**Distribution of 27 Nursing Assessment Spiritual Health Inventory Scores**

<table>
<thead>
<tr>
<th>Score</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 - 94</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>95 - 104</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>105 - 114</td>
<td>7</td>
<td>25.9</td>
</tr>
<tr>
<td>115 - 124</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>125 - 134</td>
<td>8</td>
<td>29.6</td>
</tr>
<tr>
<td>135 - 144</td>
<td>4</td>
<td>14.8</td>
</tr>
</tbody>
</table>

In considering the third question, a Spearman rank correlation coefficient was used to examine the relationship between patient age, frequency of attendance at religious
functions, subjective reports of symptom intensity, and spiritual health. The Kruskal-Wallis test also was used to determine the relationship between patients' subjective reports of symptom intensity and their spiritual health by measuring differences in SHI scores based on symptom intensity. A significant, positive correlation was identified between patient age and SHI scores ($r = .4299, p < .02$) and between decreased patient symptoms and SHI scores ($r = .4564, p < .014$), but no significant correlation was identified between frequency of attendance at religious functions and SHI scores ($r = .2716, p < .12$). Further, when patients were divided into five groups based on self-reported symptom intensity and the Kruskal-Wallis statistic was applied, results indicated no difference in patient scores based on symptom intensity $X^2 (n = 23) = 7.1524, p < .12$. Only two cells, however, had more than five frequencies.

Question four, the difference in patient self-reported spiritual health based on patient (a) sex and (b) religious affiliation, was examined next. When a Mann-Whitney U test was applied to all returned patient questionnaires ($n = 23$) in order to determine the relationship between patient sex and spiritual health, no significant differences were found between the 16 male ($M = 118$) and 7 female ($M = 123$) patient SHI scores ($U = 43.5, p < .402$, two-tailed). Additionally, there were no significant differences between SHI scores based on religious
affiliation using the Kruskal-Wallis statistic \( X^2 (n = 23) = 9.06, \ p < .059 \). While there were 7 Catholics \( (M = 111) \) and 13 Protestants \( (M = 124) \) among patient participants, 3 categories of religious preference (i.e., Jewish, None, and Other) had only one frequency per cell.

Next, nurse data were examined to determine the relationship between nurse (a) age, (b) level of education, (c) frequency of attendance at religious functions, (d) years of nursing practice, or (e) time spent caring for a patient, and nurse SHI scores (i.e., the level of spiritual health attributed to oncology patients by nurse respondents). Using the Spearman rank correlation coefficient negative, nonsignificant correlations were identified between nurse age \( (r = -.25, \ p < .12) \), level of education \( (r = -.25, \ p < .11) \), frequency of attendance at religious functions \( (r = -.18, \ p < .19) \), years of practice \( (r = -.30, \ p < .07) \), and SHI scores. A positive, nonsignificant correlation was identified between the number of days the nurse had cared for patient respondents and SHI scores \( (r = .22, \ p < .15) \). Further, a Kruskal-Wallis test, corrected for ties, revealed no significant differences between SHI scores of baccalaureate \( (M = 112) \), associate degree \( (M = 124) \), or diploma \( (M = 119) \) educated nurses \( X^2 (n = 25) = 2.89, \ p < .24 \).

The differences between nurse-assessed spiritual health based on the nurses' (a) attendance at a course on spiritual care,
(b) ethnic background, or (c) religious preference, question six, was determined by applying the Mann-Whitney U statistic to attendance and nurse SHI scores and by applying the Kruskal-Wallis statistic to nurse SHI scores divided by ethnic background and religious preference of the nurse. Using a two-tailed test corrected for ties, no significant difference was found between the SHI scores of the 8 nurses who had attended a class on spiritual care during the previous year and the 17 who had not ($U = 52.5, p < .37$). Further, the Kruskal Wallis test indicated no significant difference between nurse SHI scores when nurses were divided into groups by religious affiliations of Catholic ($M = 120$), Protestant ($M = 114$), Other ($M = 124$), and None ($M = 110$), $X^2 (a = 25) = 2.81, p < .42$. (No nurse indicated the religious preference of Judaism.)

A significant difference was found, however, between SHI scores of the 4 Afro-American ($M = 161$), 9 Asian ($M = 104$), and 12 Caucasian nurses ($M = 127$) $X^2 (a = 26) = 12.43, p < .006$. There were less than five frequencies per cell for Afro-American and Other groups. To test for any effect which the length of time the nurse had cared for the patient might exert on the differences between the nurses' SHI scores when grouped by ethnic background, the category of Other ($n = 1$) was omitted, and analysis of covariance was completed. Nurse SHI scores were again grouped by ethnic background and the variable of days the
nurse had cared for the patient was used as a covariate. Results of this test indicated no significant difference between nurse SHI scores based on nurse ethnic background $\chi^2 (2, n = 24) = 0.46, \ p < .64$.

Question seven was "What is the relationship between patient age or intensity of symptoms and the spiritual health attributed to oncology patients by their nurses?" A Spearman coefficient revealed negative, nonsignificant correlations between patient age and SHI scores of their matched nurses ($\tau = -.31$, $\ p < .09$) and between low intensity of symptoms and scores of matched nurses ($\tau = -.07$, $\ p < .39$). Further, in response to question 8, is there a difference in nurse-assessed spiritual health based on patient sex or religious affiliation, a Mann-Whitney U test revealed no significant difference between nurse scores when divided by the matched patient's sex $U (n = 21) = 37.5, \ p < .39$, two-tailed corrected for ties. Also, the Kruskal-Wallis showed no difference in nurse SHI scores based on patient religious preference $\chi^2 (n = 21) = 3.34, \ p < .34$. The mean SHI score of nurses caring for male patients was 122, and the mean score of those caring for female patients was 112. Nurses caring for Catholic and Protestant patients had an identical mean score of 119; other data cells related to patient religious affiliation had less than five frequencies per cell.
Patient and nurse rankings of 8 potential spiritual caregivers, including the category "Other," were analyzed in response to questions nine and ten: whom do patients identify as best able to help with their spiritual concerns and whom do nurses identify as best able to help patients with their spiritual concerns. Planned data analysis was to perform repeated chi-square tests on rankings, but because of limited sample size and the large number of options for spiritual caregivers, less than five frequencies were recorded for most data cells. Therefore, inferential analyses were limited to chi-square goodness of fit testing, in which the observed frequency distribution among ranks for each spiritual caregiver was compared with a hypothesized equal frequency distribution among the eight possible ranks. Nurse and patient rankings of each of the eight spiritual caregivers were separately analyzed, resulting in sixteen data analyses. In all analyses, except the two examining nurse and patient rankings of the category of "Other," expected frequencies were two or above and degrees of freedom were equal to seven. A chi-square goodness of fit test is considered valid when the average expected frequency is two, and there are two or more degrees of freedom (Roscoe, 1975). Results of analyses, however, must be viewed with caution because of the number of cells with less than five frequencies. In addition to chi-square testing, frequencies and percentages of nurse and patient rankings were
also completed. Finally, although the limited number of frequencies per cell also prevented inferential data analyses in response to the eleventh question, is there a difference between nurse-identified and patient-identified spiritual care helpers, frequencies, percentages, and significance of rankings within groups were compared.

Table 3 indicates the number of nurses and patients selecting each potential spiritual caregiver as a first, second, or third choice. Again because of limited data, the significance of differences between nurse and patient rankings could not be determined. Therefore, the following discussion of nurse and patient preferences refers only to frequencies, percentages, and significance of data in comparison with a hypothesized frequency distribution within groups.

Using frequency data, both nurse and patient respondents selected a family member or close friend as their first choice of spiritual caregivers more often than any other helper. Family member/friend was given a modal ranking of one by nurses $X^2 (n = 25) = 12.4, p < .09$ and patients $X^2 (n = 22) = 78.4, p < .0001$. All patient respondents (100%) and slightly over half the nurses (52%) selected a family member or friend as their first, second, or third choice of spiritual caregivers.

Additionally, frequencies indicated that clergy members, including both personal pastors/rabbis and chaplains, were the
second most frequently listed choice by both nurse and patient groups. Rankings of the personal pastor/rabbi, however, varied among nurses from 1 to 7 and among patients from 1 to 6. Goodness of fit testing indicated that patients selected the rank of one for personal pastor or rabbi \( X^2 (n = 19) = 17.6, p < .014 \) more often than the expected frequency.

In contrast, chi square goodness of fit testing indicated that nurse participants selected clergypersons as their second referral choice, but that patients preferred the physician as a second choice. Nurses gave both chaplain \( X^2 (n = 24) = 0.025, p < .025 \) and personal pastor/rabbi \( X^2 (n = 22) = 18, p < .012 \) a rank of two more often than the expected frequency. In contrast, patients selected the physician as their second choice for self-referral significantly more often than the expected frequency \( X^2 (n = 22) = 55.1, p < .0001 \), and 100% of responding patients ranked the physician as a first, second, or third choice. Additionally, while frequency data alone indicated that nurses placed themselves at a rank of three more often than any other caregiver, and more patients placed the physician at a rank of three more often than any other caregiver, no choices for a rank of three were significant \( (p < .05) \). These results pointed toward possible differences between nurse and patient selection of spiritual caregivers.
Table 3

Preferred Spiritual Caregivers: Frequencies of Nurse and Patient Rankings

<table>
<thead>
<tr>
<th>Caregivers</th>
<th>Nurses Rank 1</th>
<th>Nurses Rank 2</th>
<th>Nurses Rank 3</th>
<th>Patients Rank 1</th>
<th>Patients Rank 2</th>
<th>Patients Rank 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chaplain</td>
<td>6</td>
<td>3</td>
<td>7*</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Family member or friend</td>
<td>7</td>
<td>16**</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Nurse</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Personal pastor or rabbi</td>
<td>6</td>
<td>7***</td>
<td>7****</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physician</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>12**</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Psychiatrist/Psychologist</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>


In considering the nurse as a potential spiritual caregiver, half the nurses (50%) and almost half of the patients (43.8%)
indicated that they would select the nurse as a first, second, or third referral choice. Significantly more nurses $X^2 (\alpha = 8) = 18.7, \ p < .009$ and patients $X^2 (\alpha = 5) = 15, \ p < .036$ placed nurses at a rank of 4 than expected when goodness of fit testing was applied to their responses. Only three nurses and one patient placed the nurse at a rank of 1.

Only two patients (12.5%) and no nurses ranked the psychiatrist or psychologist as a first choice of spiritual caregivers, while two patients (12.5%) and three nurses (13.6%) ranked the psychiatrist or psychologist as a second or third choice. The significant modal ranking of the psychiatrist or psychologist by 10 nurses was 7, $X^2 (\alpha = 22) = 26.7, \ p < .0001$, and the significant bimodal rankings of the psychiatrist or psychologist by 5 patients each were ranks 6 and 7, $X^2 (\alpha = 16) = 15, \ p < .036$. Again significance was determined by goodness of fit testing.

Likewise only four patients (25%) and four nurses (17.4%) ranked the social worker as a first, second, or third choice of spiritual caregiver, and no nurse ranked this helper as a third or fourth choice. Furthermore, less than half of the patients (43.8%) and nurses (43.4%) ranked the social worker among their first five choices, but rankings varied from first to last choice for both nurses and patients. When chi-square goodness of fit testing was used, the modal ranking of the social worker at a rank of 6 by
10 nurses was significantly different from expected frequencies of all nurse rankings of the social worker, $X^2 (n = 23) = 29.5, p < .0001$. A modal rank of 7 by five patients was not significant, $X^2 (n = 16) = 7, p < .43$.

In addition to the spiritual caregivers listed by the researcher for respondents, some patients identified other persons or beings with whom they would talk about the concerns on the SHI, and some nurses identified others to whom they might refer patients about concerns on the SHI. Additional spiritual caregivers identified by patients included a bartender ($n = 1$), another patient ($n = 2$), "my cat" ($n = 1$), "the Lord" ($n = 1$), and "cancer groups" ($n = 1$). Nurses identified another patient ($n = 1$), a self-help group ($n = 1$), a clinical patient teacher ($n = 1$), and a hospital-employed patient advocate ($n = 3$) as potential referral sources for spiritual assistance. Expected frequency distribution for the "other" group of potential spiritual caregivers was less than one, and all data cells contained less than five frequencies.

**Summary of Findings**

In this project, 23 patients with primary lung cancer and 27 Registered Nurses completed parallel forms of the Spiritual Health Inventory (SHI) and demographic data sheets ($N = 50$). Forty-two of these respondents comprised twenty-one matched nurse-inpatient pairs. Subject responses were used to answer 11
research questions addressing the spiritual health of oncology patients and the variables related to self-reported spiritual health and nurse-assessed spiritual health. Patients reported high levels of spiritual health based on normative scaling of the SHI, and no significant relationship was identified between nurse-assessed and patient self-reported spiritual health ($p < .14$).

Additionally, various demographic independent variables were examined for relationship with the spiritual health of oncology patients as reported by the patients and as assessed by nurses. Positive correlations were found between patient age and SHI scores ($p < .02$) and between the self-reported physical well-being of patients and SHI scores ($p < .014$). No other relationships were significant. Too few data were available for in-depth analyses to determine the spiritual caregiver preferences of patient and nurse respondents and to examine the significance of differences between patient-selected and nurse-selected spiritual caregivers. Use of frequencies and percentages indicated that most nurses and patients would select a family member or friend as their first choice for spiritual assistance and would select clergypersons as second choice. In contrast, chi square goodness of fit testing indicated that while nurses selected clergypersons as a second choice for spiritual care referrals, patients selected the physician as their second choice.
of spiritual caregivers. Nurses were ranked as a fourth choice by both groups, and social workers and psychiatrists/psychologists were ranked lower than any other spiritual caregiver by both groups.
CHAPTER 5

SUMMARY OF THE STUDY

The purpose of this descriptive, cross-sectional survey was to determine whether nurses were accurately assessing the spiritual health of their oncology patients and to determine factors related to the self-reported and nurse-assessed spiritual health of oncology patients. Eleven research questions were addressed:

(1) What level of spiritual health is reported by oncology patients?
(2) Is there a difference between the self-reported spiritual health of oncology patients and nurse-assessed spiritual health of those patients?
(3) What is the relationship between patient (a) age, (b) frequency of attendance at religious functions, or (c) intensity of symptoms and the level of spiritual health reported by oncology patients?
(4) Is there a difference in the spiritual health reported by oncology patients based on patient (a) sex or (b) religious preference?
(5) What is the relationship between nurse (a) age, (b) level of education, (c) frequency of attendance at religious functions, (d) years of nursing practice, or (e) time spent caring for a patient.
and the level of spiritual health attributed to oncology patients by their nurses?

(6) Is there a difference in the spiritual health attributed to oncology patients by their nurses based on the nurses' (a) attendance at a course on spiritual care, (b) ethnic background, or (c) religious preference?

(7) What is the relationship between patient (a) age or (b) intensity of symptoms and the nursing assessment of spiritual health among oncology patients?

(8) Is there a difference in the spiritual health attributed to oncology patients by their nurses based on the patients' (a) sex or (b) religious affiliation?

(9) Whom do patients identify as best able to help with their spiritual concerns?

(10) Whom do nurses identify as best able to help patients with their spiritual concerns?

(11) Is there a difference between nurse-identified and patient-identified spiritual care helpers?

Summary

To respond to these specified research questions, demographic data sheets and parallel forms of the Spiritual Health Inventory (SHI) were distributed to a convenience sample of 40 matched nurse-inpatient pairs (N = 80) in two religiously-affiliated, nonprofit hospitals. Forty adult patients diagnosed with primary
lung cancer received a self-report form of the SHI ($\tau = .77$) and an investigator-designed, patient demographic data sheet, while the forty Registered Nurses assigned to their care received a nursing-assessment form of the SHI ($\tau = .89$) and an investigator-designed nurse demographic sheet. Twenty-seven nurses and twenty-three patients returned Inventories and demographic data sheets ($N = 50$). These participants included 21 matched nurse-patient pairs. Results were tabulated, and both parametric and nonparametric descriptive and inferential statistics were used to describe the sample and to respond to the research questions.

Discussion of Findings

The 23 patient respondents in this survey reported satisfactory levels of spiritual health by scoring above a hypothesized mean of 93 on the normatively scored, self-report form of the Spiritual Health Inventory (SHI). Because of the emphasis in the literature on the existential crisis precipitated by a diagnosis of cancer (Granstrom, 1985; Quint, 1965; Weisman & Worden, 1976), such scores may reflect a higher than expected level of spiritual health. Four explanations are offered for this finding. First, participants may have been using spiritual resources as an effective means of dealing with the diagnosis of cancer, or second, they may have moved into later life developmental phases with an increased emphasis on spiritual matters as a source of meaning. Third, the low level of physically distressing symptoms among this sample of
patients may have created less spiritual distress than would be expected from patients with many physical symptoms, and finally, those patients who were experiencing high levels of spiritual distress may not have participated. Any one or a combination of these reasons may have resulted in patient reports of normatively high levels of spiritual health on the Inventory. Each of these possibilities will be discussed in turn.

First, these patients may have found spiritual resources a previously effective coping strategy and may have been using that strategy at the time of questionnaire completion to deal with the crisis of cancer and its treatment. If spiritual values and beliefs continued to be effective for these patients, SHI scores would be more likely to reflect spiritual health than distress among patients. This explanation is supported in part by one other study in which 16 (66%) of a convenience sample of 25 oncology patients reported an increased reflection on and practice of spiritual and religious beliefs since their diagnosis (Sodestrom & Martinson, 1987), and by one oncologist author who suggested that patients usually cope with cancer in the same way they have coped with other difficulties in life (Weisman, 1979).

A second explanation for the high SHI scores of these patients could be their movement into later life developmental phases with increased reliance on values and faith for support and meaning. In this study patient age was positively related to SHI scores ($p < .02$);
increased spiritual health accompanied increased age. Multiple authors have cited the importance of spiritual concerns and religious faith as sources of meaning and support for the elderly (Cook, 1980; Ginsburg, 1980; Moberg, 1980; Phinney, 1986; Ruffing-Rahal, 1984).

Reed (1986) demonstrated that terminally ill patients move into later life developmental phases regardless of their chronological age and suggested that these phases include an increased focus on religious and spiritual matters as sources of strength ($N = 114$). Although the patients in the present study were not identified as terminally ill, lung cancer often carries a poor prognosis, distressing disease symptoms, and sometimes debilitating treatment side effects. It may be that patient participants in this project were drawing effectively on their various faiths as resources for dealing with the stimuli surrounding the diagnosis and treatment of lung cancer, and so scored highly on the normative Spiritual Health Inventory.

That almost half (48%) of patient respondents in this study reported feeling physically well most or all of the time probably also contributed to their higher levels of spiritual health and lower levels of spiritual distress. A significant positive relationship was found between low intensity of physical symptoms and SHI scores ($p < .014$); those who felt better demonstrated higher levels of spiritual health. This finding was supported by the conclusions from
another study with oncology patients in which the authors attributed increased existential distress to the number and severity of physically distressing symptoms found among lung cancer patients (n = 23) (Weisman & Worden, 1976). Further, those patients who did not feel physically or spiritually well may have been less likely to complete and return the Spiritual Health Inventory. Thus, the sample may have been skewed toward those who felt better and whose spiritual needs were more likely to be met through effective coping strategies.

No differences in the level of spiritual health reported by patients were found based on patient sex, religious affiliation, or frequency of attendance at religious functions. Findings about the relationship of these variables to spiritual concerns has varied in other studies. In one study male and female patients listed different spiritual needs (N = 90) (Martin et al., 1976), while males and females in another study used the same religious coping strategies to deal with cancer (n = 25) (Sodestrom & Martinson, 1987). Further, in terms of religious affiliation and frequency of attendance, Byrne and Price (1979) suggested that neither is an accurate indicator of how well spiritual needs are met. Although Martin et al. (1976) did not report statistical testing, they found that Catholic and Protestant patients ranked a list of spiritual concerns (i.e., what Sodestrom and Martinson would term religious coping strategies) differently. Martin et al. also found no
relationship between either religious affiliation or frequency of attendance and patient attitudes toward spiritual care. In contrast, while Sodestrom and Martinson (1987) found no relationship between religious affiliation and religious coping strategies, they did find a significant relationship between frequency of attendance and religious coping strategies. In their study, regular church attenders used more religious resource persons ($p < .005$) and activities ($p < .001$) to cope and expressed more distress over inability to attend religious functions ($H = 25$).

Results from studies cited above indicate that even though religious affiliation may not be related to the types of religious coping strategies used by patients, it may be related to the importance patients place on different spiritual concerns (Martin et al., 1976; Sodestrom & Martinson, 1987). At the same time, frequency of attendance may be related to coping because it involves clergy and a supportive community as resource persons, as well as the rituals involved in relating to a powerful, supreme other (Clinebell, 1979; Hubert, 1963; Ruffing-Rahal, 1984). The differences in findings between these other studies and the present study may be because the present study was focused on spiritual health, not on religious coping strategies. Furthermore, use of convenience sampling in all studies makes results tentative.

While in the present study both nurse and patient SHI scores indicated that patients were spiritually healthy, statistical
analyses revealed that nurse respondent scores were not congruent with patient scores. Any similarity in SHI scores was attributed to chance, since no significant correlation was found between paired nurse and patient scores ($r = -0.25$, $p < .14$). Other researchers also have suggested that nurses are not accurately assessing the spiritual and religious concerns of their patients. Authors of four separate projects found that nurses frequently identified spiritual concerns with the psychosocial, not the spiritual, dimension and that they identified overtly religious expressions of spiritual health as occurring infrequently among patients (Ford, 1987; Highfield, 1981; Highfield & Cason, 1983; Schreiber, 1987). Since many items on the self-report SHI contain overtly religious words like "God" and "faith," the high scores of patients in the present study are incongruent with the assessments of previously surveyed nurses (Ford, 1987; Highfield, 1981; Highfield & Cason, 1983).

Two additional authors also substantiated the limited spiritual and religious assessments made by nurses. Sodestrom and Martinson (1987) found that less than half (44%) of their 25 nurse respondents from a secular medical center could identify the religious affiliations of their 25 patients, a surprising finding since patient religion has been a historically accepted component of spiritual assessment. Encouragingly, 76% of these same nurses "identified that their patients found meaning and purpose in their lives through a relationship with God" (p. 44). The authors suggested that nurses
may more readily assess behaviors which they judge to be psychosocial than those thought to be spiritual (i.e., religious) in nature.

Although multiple demographic variables were examined in the present study to determine their relationship to the spiritual assessments made by nurses, none were significantly related to SHI scores. Although data analyses using the Kruskal Wallis and Dunn's post hoc tests showed that nurses of Asian background rated the spiritual health of patients significantly lower than nurses of Caucasian and Afro-American origins ($p < .006$), SHI score differences were not significant among ethnic groups when the more conservative analysis of covariance was used to control for the effect of days spent caring for the patient ($p < .64$). No other variables investigated in this project--nurse age, level of education, years of practice, time spent caring for a patient, frequency of attendance at religious functions, religious preference, attending a course on spiritual care within the previous year, patient age, intensity of patient symptoms, patient sex, and patient religious preference--were related to the spiritual health attributed to these patients by nurse respondents.

Whether or not spiritual health assessment is related to the ethnic background of the nurse has not been investigated in other studies. Some authors, however, have related ethnic background of patients to their religious beliefs and health practices (Byrne &
Price, 1979; Carson, 1989; McKenzie & Chrisman, 1977; Roberson, 1985; Schindler, 1982; Vanderpool, 1980). In one study, primarily Caucasian nurses (n = 25) assessed the religious coping strategies of Caucasian patients (n = 25) more accurately than they assessed those of other races (Sodestrom & Martinson, 1987), but only the relationship of patient ethnic background to assessment was statistically tested. In the current project nurse and patient ethnic backgrounds were quite different with primarily Caucasian patients (91.3%) and primarily minority group nurses (53.8%). The religious affiliations of both groups were similar. No other studies describing the relationship between nurse ethnic background and spiritual or religious assessment were found in the literature review.

The absence of a relationship between the nurse's level of education, years of practice, attending a class on spiritual care during the previous year, or days spent caring for the patient and spiritual health assessment have been largely supported by the findings of other investigators who also used convenience sampling. The absence of a relationship between spiritual care education and spiritual health assessment or religious assessment has been confirmed by three studies (Crigger et al., 1984; Sodestrom & Martinson, 1987; Thompson, 1987). Based on findings from a fourth study, Nelson (1976) concluded that the personal experiences of one sample of nurses enrolled in graduate school (N = 27) had a greater
impact on spiritual care than did formal education. Further, in two 
studies, no relationship was identified between length of practice 
and spiritual or religious assessment abilities of the nurse 
(Sodestrom & Martinson, 1987; Thompson, 1987), but in a third 
project, nurses with more years of practice did rank indicators of 
spiritual health differently from those nurses with less experience 
(n = 41) (Crigger et al., 1984). Length of time spent caring for the 
patient, religion of the nurse, and frequency of church attendance by 
the nurse have also been shown to have no relationship to nursing 
assessment of religious coping strategies (Sodestrom & Martinson, 
1987). The relationship between the age of the nurse and spiritual 
assessment has not been investigated, although among patients 
increased age accompanies increased focus on spiritual and religious 
concerns (Reed, 1986; Slaughter, 1979). Unfortunately, all 
investigators' use of convenience sampling makes conclusions about 
the relationships among variables tentative.

The relationship between patient characteristics and nursing 
assessment of spiritual health has not been investigated prior to 
this study, although the findings of others have indicated a need for 
such inquiry. Sodestrom and Martinson (1987) found no relationship 
between patient sex or religion and the accuracy of nursing 
assessment of religious coping strategies. Authors conducting 
earlier studies, however, suggested that men and women disclose 
different spiritual concerns (Hess, 1969; Martin et al., 1976), that
older patients focus more on religious and spiritual values (Reed, 1986; Slaughter, 1979), and that intensity of symptoms is probably related to higher levels of existential distress (Weisman & Worden, 1976). None of these variables—patient sex, religion, age, and symptom intensity—however, were related to the way nurse respondents in this study evaluated the spiritual health of their patients.

Although many variables investigated in this project were unrelated to the spiritual health assessments of these nurses, sampling procedures and questions asked in this study may have been inadequate to detect relationships between spiritual health assessment and other important variables. One variable that may affect spiritual health assessment by nurses is the acute physical or psychiatric care focus of the inpatient oncology setting, which leaves little time for attention to spiritual concerns (Highfield, 1981; Steiger & Lipson, 1985). Three-fourths (n = 19) (76%) of nurse participants in one study indicated that time constraints were a problem (n = 25) (Sodestrom & Martinson, 1987), and in the current project the physical care of patients included assisting patients with severe health deficits and providing antineoplastic chemotherapy, blood products, and other nursing intensive treatments and medications. Several nurse respondents indicated verbally to the researcher that lack of time with the patients was a problem in assessing the behaviors listed on the SHI, and some
declined to participate in the study for that reason. Data in the current project suggested that the longer the nurse cared for the patient the more highly the nurse tended to rate spiritual health of the patient, but this relationship was not significant. Although Sodestrom and Martinson (1987) also found no relationship between the length of time the nurse had cared for a patient and the ability of the nurse to assess religious coping strategies, they did find a positive relationship between how well the nurse reported knowing the patient and the ability of the nurse to assess religious coping strategies \((N = 50)\). How well a nurse reports knowing the patient might also be related to the ability of the nurse to assess spiritual health, an issue not directly addressed by this study. It may not be quantity of time with a patient that is related to assessment, but the quality of interactions during nurse-patient contacts, an idea supported by the findings of Sodestrom and Martinson (1987).

A second possible reason that nurses may not accurately assess the spiritual health of their patients may be the type or limited number of learning opportunities related to spiritual care (Steiger & Lipson, 1985). Until the past decade, only a few articles on spiritual care had been published in professional journals, and research on this topic has continued to be confined primarily to unpublished master's theses using small, convenience samples and relatively unestablished tools. Nurses in the present study and in other studies have reported a limited educational background in spiritual care.
(Crigger et al., 1984; Highfield, 1981; Highfield & Cason, 1983; Sodestrom & Martinson, 1987; Thompson, 1987). While educational programs in spiritual care are increasing (Carson & Gerardi, 1985; Emmer & Browne, 1984; Faculty, 1982; Linthicum 1985), their effectiveness may be limited by several factors. First, spiritual care education received in basic nursing education, if not immediately applied, may be forgotten. Second, the content or length of classes taken may have been inadequate to change nurse behaviors (Sodestrom & Martinson, 1987), and third, the emphasis of acute care settings on physical concerns may have precluded time to practice and learn spiritual assessment skills (Steiger & Lipson, 1985).

Another reason nurse participants in this project did not accurately assess the spiritual concerns of their patients may have been their perception of such information as less important than information about physical needs. If so, the impact of spiritual and religious concerns on physical problems and their treatment was probably underestimated. Multiple authors have suggested that the religious and spiritual concerns of patients have a direct impact on the ability of the patient to cope with disease and to participate in accepted medical therapies (Byrne & Price 1979; Fish & Shelly, 1988; Flowers, 1984; Schindler, 1982; Stoll, 1979; Symm & Travis, 1985; Vanderpool, 1980; Wyszynski, 1986).
A fourth reason these nurses did not accurately assess the spiritual health of their patients may have been the expectations of the patients (DeYoung, 1986). Patients enter the hospital for pressing physical problems and may look to nurses and physicians for assistance with these, while they have reported looking to clergy, family, friends, or themselves for spiritual or religious help (Hess, 1969; Martin et al., 1976; Sodestrom & Martinson, 1987). Since patients anticipate that the nurse will want to know about physical complaints, they may readily confide these in the nurse with minimal or no prompting. If, on the other hand, they do not anticipate that the nurse will want to know about spiritual concerns, they may hesitate to share these without being directly asked (DeYoung, 1986; Peteet, 1985).

Peteet (1985) found that oncology patients did not object to questions about their beliefs and sometimes volunteered information about spiritual and religious concerns. He encouraged health care professionals to take a more active role in listening to the religious and spiritual concerns of patients, suggesting that patients are eager to share these concerns. Although patients in three studies might agree with Peteet, that nurses can and should take an active role in spiritual support (Hess, 1969; Martin et al., 1976; Sodestrom & Martinson, 1987), the experiences of patients with nurses who omit spiritual assessment may have prevented patient disclosure of these concerns in the current project.
The ranking of potential spiritual caregivers by this sample of patients supported the possibility that patients did not disclose spiritual concerns to their nurses. When asked with whom they would talk about the concerns listed on the Spiritual Health Inventory, patients in this study ranked family member/friend or personal pastor/rabbi as first choices and the physician as a second choice. None of the possible spiritual caregivers was ranked more significantly than any other as a third choice, and nurses were ranked fourth. The lowest ranked spiritual caregivers were psychiatrists or psychologists and social workers.

The priority choices of spiritual caregivers by these patients included those individuals with whom patients may have had long-standing, personal relationships: family, friends, and personal clergy. The physician may have been ranked more highly than the nurse for this same reason, that patients may have a more continuous and personal relationship with the physician as a single caregiver, while contacts with nurses are intermittent and involve multiple caregivers. Some authors have suggested that the nurse is an appropriate spiritual caregiver because of ease of availability in the hospital (Fish & Shelly, 1988; Highfield & Cason, 1983), but availability did not seem to be the primary consideration of these inpatients in selecting spiritual caregivers. Perhaps as DeYoung (1986) suggested, patients may be more likely to discuss spiritual concerns within an already established, trusting relationship.
Although little research is available identifying the spiritual helpers preferred by patients, inpatients in two other studies (N = 109 and N = 90) indicated their first self-referral choice for spiritual assistance would be the clergy (Hess, 1969; Martin et al., 1976) and that their second choice would be a nurse (Hess, 1969) or a family member (Martin et al., 1976). This difference in findings between the present study and other projects may have resulted either from using a nurse interviewer to ask questions about overtly religious concerns in other studies or from differences between studies in the way questions about nursing involvement in spiritual care were asked. While the researcher in the present project was a nurse, minimal to no investigator-patient interaction about items on the SHI was required. Even though questionnaire items were read to four patient respondents because of patient visual impairments, no discussion of question content occurred. DeYoung (1986) noted that how she asked questions about spiritual care by nurses affected patient answers: “When I asked who had provided spiritual help, seven patients said they had received help from nurses. But when I asked patients what they had done about their spiritual needs, they did not mention nurses as a resource” (p. 32). Her conclusion, that patients do not perceive nurses as appropriate spiritual helpers and may be unlikely to disclose very personal spiritual concerns to a nurse, has not been substantiated by other researchers (Hess, 1969; Martin et al., 1976; Sodestrom & Martinson, 1987).
Finally, the accuracy of the spiritual health assessments made by nurse respondents in this study may have been affected by how these nurses perceived themselves as potential spiritual caregivers. Nurses who see other professionals as more appropriate spiritual caregivers than themselves may not actively elicit patient spiritual concerns. When nurse participants in the current project were asked to whom they would refer the patient for assistance with concerns listed on the Spiritual Health Inventory, they, like patient participants, ranked themselves as a fourth choice. While none of the possible spiritual care helpers was chosen significantly more often than any other as a first or third choice, significantly more of these nurses ranked either the chaplain or personal pastor/rabbi as their second choice. These results seem to indicate that the religious nature of many of the SHI items may have had a greater influence on the referral choices of nurses, than did consideration of the potential long-term relationships of patients with family, friends, or physician. Nurses' ranking of themselves as a fourth referral choice may indicate a perception of low involvement with spiritual and religious concerns of patients perhaps because of habit, time pressures, discomfort with the topic, or lack of knowledge (DeYoung, 1986; Fish & Shelly, 1988; Sodestrom & Martinson, 1987; Steiger & Lipson, 1985), and this low involvement may have contributed to their inaccurate assessment of the spiritual health of these oncology patients.
Conclusions and Implications

While the sampling procedures used in this study preclude generalization of findings to a larger population, the findings raise some important issues for nursing practice. If nurses believe that persons are physical, psychosocial, and spiritual beings and if nursing is defined as care of the whole person, then nurses must learn to deal effectively with all patient concerns, including the spiritual ones. The nurse who is unaware of patient values and beliefs will be unable to understand many health care behaviors of patients. Therefore, it becomes important to draw conclusions from this study which can assist the nurse in improving spiritual health assessment. The following conclusions, while limited to respondents in this study, are suggested:

(1) Many oncology patients report satisfactory levels of spiritual health;

(2) Nurses may not be accurately assessing the spiritual health of their oncology patients;

(3) Older patients and those patients who have few distressing physical symptoms tend to experience higher levels of spiritual health;

(4) Patient sex, religion, age, intensity of symptoms, and time spent caring for the patient are unrelated to nursing assessment of the spiritual health of patients;
(5) Patient sex, religious affiliation, and frequency of attendance at religious functions are unrelated to the self-reported spiritual health of patients;

(6) Nurse age and years of experience are unrelated to spiritual health assessment;

(7) Basic educational preparation of the nurse and nurse participation in classes specifically related to spiritual care are not related to spiritual health assessment by nurses;

(8) Patients’ choices of potential spiritual caregivers differ from the referral choices made by nurses;

(9) Patients prefer family, friends, personal clergy, and physicians as spiritual caregivers;

(10) Nurses may choose to refer patients in need of spiritual assistance to family members and friends, personal pastors/rabbis, or the hospital chaplain; and

(11) While many patients and nurses prefer clergypersons as spiritual caregivers, for some persons this choice is not a priority.

Several implications can be drawn from these conclusions. First practicing nurses must not assume that all persons diagnosed with cancer are experiencing high levels of spiritual distress in which values and previous sources of meaning are called into question. While there is adequate literature to support the conclusion that patients do experience such distress during certain
periods after diagnosis, none of the 23 patients who completed the SHI in this project were highly distressed. To the contrary, most indicated a normatively high level of spiritual health. While it must be acknowledged that the study was limited to a convenience sample of persons with lung cancer and that the patient self-report SHI may not be sufficiently established to draw firm conclusions, the results of this study should encourage nurses to assess the spiritual health of their oncology patients individually. Some patients may use spiritual resources to cope effectively with their diagnosis and treatments; others may not.

A second implication of this study is that nurses may need to improve their spiritual health assessment practices. The patient who is coping effectively and the patient who is not may need different kinds of nursing assistance, but neither group can be helped without accurate assessment. Because the findings of this project combined with others suggested that it may be the quality, not quantity, of time spent with the patient that determines accurate spiritual assessment, nurses may need to consider taking a more active role in this aspect of care. They should not wait on the patient to bring up spiritual concerns. Nurse-initiated spiritual assessment strategies which can be completed during routine patient care activities, such as the admission interview, would maximize use of available time. Such strategies may help communicate to the patient that the nurse considers all sources of
meaning and support for the patient important and that the nurse is willing to assist the patient with spiritual concerns (Stoll, 1979). Indicating a willingness to help with spiritual concerns is important, since in the hospital setting, nurses are probably more accessible than personal clergy and physicians, and perhaps even more accessible than family members or friends. If nurses do not give patients permission to discuss spiritual concerns, patients may not be aware that nurses can assist them in meeting spiritual needs and may hesitate to bring up the topic themselves. As with the deeply personal topic of sexuality, it may be the responsibility of the professional, not the patient, to open conversation.

Any discomfort of the nurses in this study in initiating conversation with patients about spiritual concerns could have limited spiritual assessment and could have contributed to the ranking of nurses as a fourth choice of spiritual caregiver. Continuing to omit spiritual assessment, however, cannot be justified by arguing from the past or on the basis of nurse discomfort since new care technologies are initiated almost daily in the practice setting. The role of the nurse is not static, but functional and dynamic, including and adding whatever activities and behaviors are helpful to society (Campbell, 1985). Assisting the patient to deal effectively with illness and its sequelae in the context of the individual's values, beliefs, and relationships is appropriate and helpful both from patient (Hess, 1969; Martin et al.,
1976; Sodestrom & Martinson, 1987) and nurse perspectives (Fish & Shelly, 1988; Granstrom, 1985; Schreiber, 1987).

Third, nurses must identify and influence pressures which curtail spiritual health assessments. One source of subtle time, peer, and administrative pressures may be the philosophy and administrative structure of health care institutions. Many settings place a greater emphasis on collecting data related to traditional medical practice, which is concerned with physical disease, and less emphasis on collecting data related to wholistic nursing practice, which tries to assist the patient with all aspects of health. One reflection of such emphasis on physical concerns and de-emphasis on spiritual concerns is found on most nursing admission interview forms which ask for a system by system assessment of physical health, but no assessment of spiritual health other than religious affiliation.

Fourth, even though some nurses may have limited knowledge of spiritual needs, they may be able to use their knowledge of the physical condition of patients to help them identify those at risk for spiritual distress. The patient who is older or who is experiencing less distressing physical symptoms may be more focused on spiritual or religious issues or may exhibit more signs of spiritual health, while the patient who is younger or experiencing many physical symptoms is perhaps more likely to experience spiritual distress.
Additionally, the lack of relationship between spiritual care classes taken during the previous year and the spiritual health assessments of nurses, raises questions about the effectiveness of spiritual care education provided. Educators must critically review both content and length of classes related to spiritual care in order bring about changes in clinical practice. Content should be examined both for an adequate theoretical base and appropriate practical implications. Incorporating role playing or clinical practice into classes may provide the impetus for nurses to begin to include spiritual health assessments in their routine care.

Finally, nurses must identify the person(s) whom each patient prefers for spiritual or religious support. While the nurse may be more aware of spiritual resources available within the hospital, such as chaplains, the patient may prefer support from someone with whom they have had an ongoing relationship. Referrals for spiritual assistance should be individualized, particularly since some patients identify clergypersons among their least preferred choices of spiritual caregivers.

Recommendations for Further Study

This investigation of the spiritual health of persons with cancer can best be used as a springboard for further research. Since findings cannot be generalized because of sampling procedure, results must be confirmed or refuted through additional research. Three possible studies are suggested:
(1) Methodological studies designed to further support the reliability and the validity of the Spiritual Health Inventory (SHI),
(2) Replication of the present study,
(3) Descriptive or quasi-experimental studies examining the effectiveness of spiritual care education.
Each of these will be discussed in turn.

First, because the conclusions in this study rest heavily on the accuracy of the research instrument, the continued collection of data related to the reliability and validity of the Spiritual Health Inventory (SHI) should be pursued. Both the nursing assessment SHI and the patient self-report SHI should be tested with more subjects from various geographic areas, ethnic backgrounds, and religious affiliations or non-affiliations. The patient self-report SHI should be completed by persons with various types of cancer, by healthy populations, and perhaps by persons with other diagnoses to detect any differences in scores related to physical health status. Reliability statistics and factor analysis completed with a larger data pool would provide more support for any study conducted with the Spiritual Health Inventory.

For these additional studies one modification of both nurse and patient questionnaires should be considered. Changing the anchors on the SHI scale from "always" and "never" to "strongly agree" and "strongly disagree" will make it easier for subjects to respond to
some negatively worded SHI items. The current anchors were assigned during early studies using the Spiritual Health Inventory. The purpose of those projects was to identify how frequently certain patient behaviors and feelings occurred among oncology patients, and the instrument was scored by determining individual item frequencies (Crigger et al., 1984; Ford, 1987; Highfield, 1981; Highfield & Cason, 1983; Schreiber, 1987). In the current study the Spiritual Health Inventory was used as a summated scale providing ordinal data, and so a change in anchors would be appropriate. Further, items would be more readable if they measured how strongly, rather than how often, a person experienced certain feelings. Authors of one well-established summated scale measuring spiritual well-being used the anchors "strongly agree" and "strongly disagree" to elicit patient responses to a list of 20 beliefs and feelings (Paloutzian & Ellison, 1979).

A second important study would be a replication of the current project using different sampling or statistical procedures. Systematic random sampling would lend more strength to findings and would be possible with access to a larger population of oncology patients and Registered Nurses. Multiple non-significant relationships identified between variables in this study might prove to be significant with random or larger sampling. For example, a difference between patient SHI scores based on religious affiliation of the patient was significant at $p < .06$, a level of significance
unacceptable for this study but suggestive of the need for further investigation. Additionally, the use of multiple regression techniques may help identify the intercorrelation of multiple independent variables as predictors for patients at risk for spiritual distress, and a replication study with a larger sample would provide adequate data for indepth inferential testing of differences in spiritual caregivers selected by nurses and patients. Finally, one additional question suggested for replication studies is to ask the nurse whether the nurse knew the matched patient as well as or better than other patients for whom the nurse had cared. This question would help tease out the importance of quality versus quantity of time spent caring for a patient.

Third, projects examining the effectiveness of spiritual care education can help educators learn how to best prepare the professional nurse to assist the patient in meeting spiritual needs. Examples might include a longitudinal study examining the relationship between spiritual care content included in basic nursing curricula and practices of graduates. This type of study would help to determine whether or not the practicing nurse is providing care founded on a knowledge base or philosophy of care gained during formal education or from other sources. Also a before and after quasi-experimental design could also be used to determine the relationship between inservice or continuing education spiritual care classes and the spiritual assessment abilities of the nurse.
Many studies in the past have used open-ended questions to investigate the spiritual health reported by patients and assessed by nurses. Use of the Spiritual Health Inventory for patient and nurse responses in future studies, however, will make comparison of the two groups easier by providing quantitative data. Studies identifying the self-reported spiritual health of patients and the environmental factors which impinge on both the ability of persons to meet their spiritual needs and the ability of the nurse to accurately identify spiritual distress or spiritual health can be another step toward providing care for the whole person.
REFERENCES


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APPENDIX A

HIGHFIELD CONCEPTUAL FRAMEWORK
THE NURSING PROCESS

1. Assessment: Factors influencing the person's behavior

2. Assessment: Client behaviors

3. Problem identification, Diagnosis, & Priority setting

4. Goal setting

5. Intervention

6. Evaluation

PERSON-ENVIRONMENT INTERACTION

Environmental Stimuli

Whole biological-psychosocial-spiritual Person

Perception of stimuli as threatening (possible or actual harm may result)

Perception of stimuli as pleasurable or challenging

Response of the Whole Person with all assets & limitations

Stimuli > Person

Deficiency motivation

Unmet basic needs

Illness (stimuli>person)

Absence of illness (stimuli=person)

Health (stimuli<person)

Stimuli = Person

Met basic needs

Stimuli < Person

Growth motivation

Met basic needs

Figure 3: The Highfield Conceptual Model of Nursing

*See Figure 4 for more detail.
Assessment

Problem Identification, <--
diagnosis, & priority setting

Goal Setting

Intervention

Evaluation ----> ---------
APPENDIX C

TEXAS WOMAN'S UNIVERSITY HUMAN SUBJECTS REVIEW APPROVAL

139
STUDENT'S NAME: Martha Ellen Farrar Highfield, R.N., M.N.Sc.

PROPOSAL TITLE: The Spiritual Health of Oncology Patients: A Comparison of Nurse and Patient Perceptions

DATE: 11/17/87

Disapprove

Approve

Disapprove

Approve

Disapprove

Approve
APPENDIX D

AGENCY APPROVAL SIGNATURE SHEETS
AGENCY PERMISSION FOR CONDUCTING STUDY *

THE Methodist Hospital, Houston, Texas

GRANTS TO Martha Ellen Highfield R.N., M.N.Sc.
a student enrolled in a program of nursing leading to a Doctoral Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

The Spiritual Health of Oncology Patients:
A Comparison of Nurse and Patient Perceptions

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other

Date: __________

Signature of Student

Signature of Faculty Advisor

* Fill out and sign three copies to be distributed as follows: Original-Student; First copy - agency; Second copy - TWU College of Nursing.

/bc
APPENDIX E

NURSE AND PATIENT COVER LETTERS
COMPLETION AND RETURN OF THESE FORMS CONSTITUTES CONSENT TO PARTICIPATE

I am conducting a survey on the needs of hospitalized cancer patients. This survey is part of my course work at Texas Woman's University in a program leading to a Ph.D. in nursing. The purpose of this study is to help nurses to better understand the feelings and needs of persons with cancer. Your responses would be very helpful.

Participation in this research is voluntary, and you may withdraw at any time. If you agree to participate, you will be asked to complete the attached personal data sheet and survey form and to return them in the attached stamped envelope. It is important that you complete both forms. The questions on the personal data sheet have been asked in order to help understand your responses from your own life situation and will not be used to identify you personally. Do not place your name on the questionnaire so that confidentiality may be maintained.

It will take about 15 minutes to complete both forms.

There are no right or wrong answers to the questionnaire, but because different persons see things differently your answers may not be the same as those of others. This difference is what makes your contribution valuable.

The findings of this survey will be used for research, educational, and publication purposes. Only group data will be reported for any of these purposes. Other staff and patients will not have access to your answers, nor will they be told if you do not want to participate. No information you provide will be placed in your personnel file or records. All questionnaires will be coded for analysis purposes only and codes will not be used to identify you by name.

You may benefit directly or indirectly from participating in this survey. Direct and indirect benefits may include (a) improved knowledge of patients' needs and feelings, (b) improved patient assessment, (c) the knowledge that you have contributed toward improving patient care, and (d) possibly a better understanding of your own feelings.

Since this is a questionnaire survey and there are no similar studies being conducted within this hospital at this time, the alternative to participating in this survey is not to participate. The risks of participating include (a) possible embarrassment or anxiety about being identified in reports of the study, (b) possible anxiety related to increased thinking about your relationships, values, or beliefs, (c) possible anxiety about how your answers compare with others, or (d) feeling pressure to participate in the survey. The assurances and steps listed in this letter are being taken to minimize these risks: participation is voluntary, confidentiality will be maintained, someone will be available to talk with you about the survey if you so request, and questionnaire answers reflect your individual assessment.

Some persons may find that after completing the questionnaire that they wish to talk with someone. Should you want to talk with someone I will be
available to talk or to make a referral, or you may contact Rev. Robert Kidd, the designated staff support person, at the number listed below.

Although it is anticipated that no harm will result from your participation in this study, no medical service or compensation is provided to subjects by Texas Woman's University as a result of injury from participation in this research. Your completing and returning the attached forms indicates that you understand the above information and agree with the following statement: "I understand that in the event of physical injury incurred during the research procedures described to me, that Baylor College of Medicine and/or The Methodist Hospital are not able to offer financial compensation nor to absorb the costs of medical treatment. However, necessary facilities, emergency treatment and professional services will be available to research subjects, just as they are to the community generally."

Please feel free to ask any questions about this survey now or at any time later. If you would like, a report of the results will be available to you from the researcher when the survey is complete. I can be reached at the phone number below.

Thank you for participating.

Martha Highfield, RN, MNSc

Robert Kidd.......... [Redacted] (Chaplaincy Department)
Martha Highfield [Redacted]
Patient Cover Letter

COMPLETION AND RETURN OF THESE FORMS INDICATES CONSENT TO PARTICIPATE

I am conducting a survey of the needs of hospitalized cancer patients. This project is part of my course work at Texas Woman's University in a program leading to a PhD in nursing. The purpose of the survey is to help nurses to better understand the feelings and needs of persons who have cancer.

It will take about 15 minutes to complete the forms.

Participation in this project is voluntary, and you may withdraw at any time. If you agree to participate, you will be asked to complete the attached personal data sheet and survey form and to return them to me in the attached stamped envelope. It is important that you complete both forms. The questions on the personal data sheet have been asked in order to help understand the needs of patients from their own personal life situation and will not be used to identify you. Do not place your name on the survey form.

There are no right or wrong answers to this survey, and because different persons have different needs and feelings your answers may not be the same as those of others'. This difference is what makes your contribution so helpful.

The findings of this project will be used for research, educational, and publication purposes. Only group data will be reported for any of these purposes. Other patients and staff will not have access to your answers. They will not be told if you do not want to participate, and no information you provide will be placed in your chart or records. All forms will be coded for analysis purposes only and codes will not be used to identify you by name.

You may benefit directly or indirectly from participating in this project. Benefits include (a) a better understanding of your own feelings and needs, and (b) the knowledge that you have contributed to improving patient care.

The alternative to participating in this survey is not to participate. The risks of participating include (a) possible embarrassment or anxiety about being identified in reports of the study, (b) possible anxiety related to increased thinking about your relationships, values, or beliefs, (c) possible anxiety about how your answers compare with others, or (d) feeling pressure to participate. The assurances and steps listed below are being taken to minimize these risks: participation is voluntary, confidentiality will be maintained, someone will be available to talk with you about the survey if you wish, and questionnaire answers are not right or wrong but indicate the way you feel as an individual.

Some persons may find that after completing the questionnaire that they wish to talk with someone. Should you want to talk with someone, you may call any of the numbers listed below. Also if you would like to meet with a patient group, please contact the American Cancer Society at the number listed below.

Although it is anticipated that no harm will result from your participation in
this study, no medical service or compensation is provided to subjects by Texas Woman's University as a result of injury from participation in this research. Your completing and returning the attached forms indicates that you understand the above information and agree with the following statement: "I understand that in the event of physical injury incurred during the research procedures described to me, that Baylor College of Medicine and/or The Methodist Hospital are not able to offer financial compensation nor to absorb the costs of medical treatment. However, necessary facilities, emergency treatment and professional services will be available to research subjects, just as they are to the community generally."

Please feel free to ask any questions about this project now or at any time later. If you would like, you may obtain a report of the results. I can be reached at the phone number listed below.

Thank you for participating.

Martha Highfield, RN, MNSc

Chaplaincy........Extension [Redacted] (Robert Kidd)
Social Work........Extension [Redacted] (Linda Collins MSW)
American Cancer Society......Phone [Redacted] (Information on Patient Support Groups)

M. Highfield....................[Redacted]
NURSES' PERSONAL DATA SHEET

COMPLETION AND RETURN OF THESE FORMS INDICATES YOUR CONSENT TO PARTICIPATE

PLEASE CHECK ONE:

1. Sex: ______ Male
    ______ Female

2. Ethnic background:
    ______ Afro-American
    ______ Asian
    ______ Caucasian
    ______ Other (please specify) _____________________________

3. Highest level of Nursing Education completed:
    ______ Diploma
    ______ Associate Degree
    ______ Baccalaureate Degree
    ______ Master's Degree
    ______ Degree in Other Field (please specify) _______________

4. Religious preference:
    ______ Catholicism
    ______ Judaism
    ______ Protestantism
    ______ None
    ______ Other (please specify) _____________________________

5. I have attended a class on spiritual care of patients within the past year.
   ______ Yes
   ______ No

PLEASE FILL IN THE BLANK:

6. Age ______

7. Total years of nursing practice ______

8. Number of days I have cared for this patient ______

(Fill in one blank)

9. I attend religious functions ______ times a week
    ______ times a month
    ______ times a year
    ______ never
COMPLETION AND RETURN OF THESE FORMS INDICATES YOUR CONSENT TO PARTICIPATE

NURSING ASSESSMENT

A list of patient feelings and concerns are listed below. Please indicate how often your patient has expressed each feeling or concern by circling the appropriate number to the right of each item.

If your patient expresses the behavior or feeling all of the time circle "5," if he or she has expressed the item most of the time circle "4," if some of the time circle "3," and if almost never circle "2." If he or she has never expressed the behavior or feeling circle "1."

It is important that you respond in some way to every item.

When you have completed the questionnaire please return it to the investigator in the attached stamped envelope. Thank you for your participation.

EXAMPLE:

Feeling or concern

Says he is happy.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Marking "4" indicates that most of the time your patient has said he or she is happy.

ITEMS:

Feeling or concern

1. Expresses anger with self.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Expresses ambivalent feelings toward God.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Exhibits overly dependent behaviors.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Denies the reality of his or her condition.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

6. Expresses feelings that life or illness is meaningless.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

7. Indicates personal faith or values as a source of support.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Never</td>
<td>Almost never</td>
<td>Some of the time</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>8.</td>
<td>Does not want to become dependent on other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>Expresses resentment toward God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>Exhibits emotional detachment from self and peers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Expresses belief that God can help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Worries about separation from others through death.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>Is concerned about how the family will manage when he/she is gone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Expresses fear of being unable to provide for family because of illness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>Expresses feelings of a loss of faith in his or her God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>Expectations of treatment outcomes are the same as those of medical and nursing staff.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>Talks about his condition realistically.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>Expresses anger with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>Asks for help appropriately.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>Expresses fear of loss of control.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>Refuses to cooperate with health care regimen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22.</td>
<td>Expresses belief that things will be better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23.</td>
<td>Expresses loss of self-value due to decreasing physical capacity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24.</td>
<td>Expresses fear of tests and diagnosis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25.</td>
<td>Jokes about life after death.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
26. Expresses anxiety about inability to pursue career, marriage, and parenting because of illness.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

27. Expresses guilt feelings.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

28. Questions why he or she is suffering or ill.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

29. Expresses fear of therapy.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

30. Expresses feeling lack of supportive others.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

31. Confesses thoughts and feelings about which he is ashamed.  
   | Never | Almost | Some of | Most of | All the |
   | 1     | 2      | 3       | 4       | 5       |

RANK the FOLLOWING from FIRST TO LAST.  
Use "1" for your first choice, "2" for your second choice, "3" for your third choice, and so on until all are ranked.

32. If I were to refer my patient to anyone about the above behaviors or feelings, I would refer him or her to:
   _____ a chaplain.
   _____ a family member or close friend.
   _____ myself as the nurse.
   _____ a personal pastor/rabbi.
   _____ a physician.
   _____ a psychiatrist/psychologist.
   _____ a social worker.
   _____ Other (please specify) ____________________________

COMMENTS:
APPENDIX G

PATIENT DEMOGRAPHIC SHEET AND SPIRITUAL HEALTH INVENTORY
COMPLETION AND RETURN OF THESE FORMS INDICATES YOUR CONSENT TO PARTICIPATE

PATIENT SURVEY

PLEASE CHECK ONE:

1. SEX:  
   _____ Male  
   _____ Female

2. MARITAL STATUS:  
   _____ Single  
   _____ Married  
   _____ Widowed  
   _____ Divorced or Separated

3. ETHNIC BACKGROUND:  
   _____ Afro-American  
   _____ Asian  
   _____ Caucasian  
   _____ Hispanic  
   _____ Other (please specify)

4. EDUCATIONAL LEVEL, HIGHEST COMPLETED:  
   _____ Did not complete High School  
   _____ High School or GED  
   _____ Vocational Training  
   _____ Two year College Degree  
   _____ Four year College Degree  
   _____ Master's Degree  
   _____ Doctoral Degree  
   _____ Other (please specify)

5. RELIGIOUS PREFERENCE:  
   _____ Catholicism  
   _____ Judaism  
   _____ Protestantism  
   _____ None  
   _____ Other (please specify)

6. I feel physically good:  
   _____ All of the time  
   _____ Most of the time  
   _____ Some of the time  
   _____ Almost never  
   _____ Never

PLEASE FILL IN THE BLANK:

7. Age:  

8. Occupation:  

(Fill in one blank)

9. I attend religious functions  
   _____ times a week  
   _____ times a month  
   _____ times a year  
   _____ never
COMPLETION AND RETURN OF THESE FORMS INDICATES YOUR CONSENT TO PARTICIPATE

PATIENT SURVEY

The following items are a list of some patients' feelings and concerns. Please indicate how frequently you have experienced each one by circling a number to the right of each item.

If you experience an item all the time circle "5," if you experience an item most of the time circle "4," if some of the time circle "3," and if rarely circle "2." If you have never experienced an item circle "1."

It is important that you respond in some way to every item.

When you have completed the questionnaire please return it in the attached stamped envelope. Thank you for your participation.

EXAMPLE:

<table>
<thead>
<tr>
<th>Feeling or concern</th>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel happy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4 (4)</td>
<td>5</td>
</tr>
</tbody>
</table>

Marking "4" indicates that you feel happy most of the time.

ITEMS:

<table>
<thead>
<tr>
<th>Feeling or concern</th>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel hopeful about my future</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I believe God can help me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I believe that things will turn out for the best.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I wonder if God is angry with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I feel valuable as a person even when I cannot do as much as before.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The doctors and nurses agree with my comments about my health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I feel angry with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never</td>
<td>Almost never</td>
<td>Some of the time</td>
<td>Most of the time</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>8.</td>
<td>I believe God accepts me even with my faults.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>I worry about tests and diagnosis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>I feel this illness has no purpose or meaning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>I believe other people accept me even with my faults.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12.</td>
<td>I feel out of touch with my own feelings and with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13.</td>
<td>I believe nothing can be done for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14.</td>
<td>I have both strong negative and positive feelings toward my faith.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15.</td>
<td>I worry about my inability to provide for my family during my illness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16.</td>
<td>I have been able to adapt to any decreased involvement in career, marriage, and parenting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17.</td>
<td>I am afraid of my treatments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18.</td>
<td>I believe that things will be better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19.</td>
<td>I worry about losing control of my situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20.</td>
<td>I believe my nurses and doctors care about me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>I believe other people can help me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>I feel a need to be forgiven for some of my thoughts and feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>I feel that other people are available to help when I need them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
24. I worry about life after death. 

25. I actively participate in decisions concerning my health care. 

26. I feel that it is unfair that I am ill. 

27. I am able to maintain a balance between independence and dependence. 

28. I feel accepted and forgiven despite some past actions. 

29. I feel angry with myself. 

30. I am able to find things I enjoy doing. 

31. My life has a purpose. 

RANK ALL the FOLLOWING from FIRST TO LAST. Use "1" for your first choice, "2" for your second choice, "3" for your third choice, and so on until all are ranked. 

32. If I wanted to talk with someone about any of the above feelings or concerns, I would talk with 

______ a chaplain. 
______ a family member or close friend. 
______ my nurse. 
______ my personal pastor/rabbi. 
______ my physician. 
______ a psychiatrist/psychologist. 
______ a social worker. 
______ Other (please specify) ________________________

COMMENTS: