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Spiritual Well-Being And Coping In Women With Breast Cancer

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SPIRITUAL WELL-BEING AND COPING IN WOMEN WITH BREAST CANCER

by

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Abstract

Breast cancer is the most common form of cancer among American women, with 180,000 new cases reported each year. The physiological, emotional, and spiritual challenges of the disease can be awesome. The purpose of this descriptive study was to determine if there was a relationship between spiritual well-being and coping in women with breast cancer. The theoretical framework which guided the research was the Neuman Systems Model. The research hypothesis for the study was there will be a significant positive correlation between spiritual well-being and coping in women with breast cancer. Using a convenience sample of 31 women between the ages of 30 and 75 years who had a diagnosis of breast cancer, data were collected using Paloutzian and Ellison's Spiritual Well-Being Scale, the Jalowiec Coping Scale, and a researcher-designed demographic questionnaire. Statistical analysis using Pearson product-moment correlation did not reveal a significant positive correlation between spiritual well-being and total coping use and helpfulness. The research hypothesis was rejected. Additional findings revealed that the primary coping styles utilized by women with breast cancer were optimistic and supportant. A positive

correlation emerged between religious well-being and total spiritual well-being and the use of the supportant coping style. Total spiritual well-being as well as religious well-being and existential well-being were positively correlated with the helpfulness of the optimistic and supportant coping styles. A negative correlation was found between religious and total spiritual well-being and the fatalistic coping style usage and between religious well-being and fatalistic coping style helpfulness. Participants cited "faith in God" and "love from friends and family" as the two major influential factors in helping them to cope with the diagnosis of breast cancer. The researcher concluded that the styles most utilized by and helpful to women with breast cancer were the optimistic and supportant coping styles. Recommendations for nursing education included incorporation of spiritual well-being and coping assessment skills into basic nursing education. Recommendations for research included replication of the study with healthy women and performing a qualitative study on spiritual well-being in women with breast cancer.

Dedication

At midpoint of spring semester I was diagnosed with a pelvic mass. Although subsequent surgery revealed its benign nature, the interim between discovery and surgery was emotionally and spiritually challenging! By the Grace of God and the prayers and love of family and friends, I made it through a difficult experience. God has some wonderful ways to sensitize us to others' plight and make us so thankful for life. The experience has made me more understanding and empathetic to the situations each of these women in my study has endured. Each woman shared a special part of herself by answering the questionnaires. Many wrote notes of encouragement about my project.

To each of these women who participated in my research, and especially to Deborah Braud, a shining example of spiritual well-being who lost her battle with breast cancer this year, I dedicate this thesis.

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Chapter I

The Research Problem

The diagnosis of breast cancer has been one of the most devastating diagnoses for a woman to receive. "The breast is an important cultural symbol of femininity and an intimate part of the patient's self-esteem" (Williams, O'Sullivan, Snodgrass, & Love, 1995, p. 103). Oftentimes in American culture, cancer has been equated with death (Williams et al., 1995) although statistics have shown that this is frequently not the case (American Cancer Society, 1995a). The diagnosis alone has forced women to face some difficult decisions and to deal with some degree of pain, disfigurement, and uncertainty. In addition to her own adjustment, the woman might be confronted with helping her family cope with the worry and anxiety associated with a loved one's illness. The task can be awesome.

Sadness, grief, and anger have been identified as normal emotions experienced initially by women with breast cancer (Williams et al., 1995). At some point in time, many women turn their cancer experience into a meaningful and positive life experience by coping with the situation. Research findings have indicated that spiritual well-being

may be an important determinant in successful coping with devastating life situations (Fredette, 1995). Yet, little research has been done which explores the relationship between spiritual well-being and coping in women with serious illness. Thus, the focus of this study was to determine whether there is a relationship between spiritual well-being and coping in women with breast cancer.

Establishment of the Problem

Breast cancer has been determined to be the most common form of cancer among American women. One in nine women will have developed breast cancer in her lifetime (American Cancer Society, 1995a). More than 180,000 American women will develop breast cancer this year, and about 46,000 will die because of breast cancer (American Cancer Society, 1994). The 5-year survival rate for localized breast cancer is 94%; for regional spread at the time of diagnosis, the 5-year survival rate is lowered to 73%; for persons with distant metastasis at time of diagnosis is 18% (American Cancer Society, 1995a). The 5-year survival rate includes all women living 5 years after diagnosis, some of whom are in remission, some disease-free, and some still under treatment. Whatever the circumstances, there remains an element of fear and uncertainty in all women who have experienced the diagnosis.

Breast cancer survivors have been forced to continue living and by doing so will develop some sort of coping mechanisms, some helpful and healthy, and others not. Some recent studies (Kaczorowski, 1989; Landis, 1996; Mickley, Soeken, & Belcher, 1992) have indicated that healthy coping is strongly related to spiritual well-being in certain chronic illnesses. Studies have been done to examine how women cope, and other studies have examined spiritual well-being. However, few, if any, have correlated the two concepts.

The concept of coping has been defined as "to struggle or contend, especially on fairly even terms or with some degree of success" (Costello, 1995, p. 300). Lazarus and Folkman (1977), using the psychology model, define coping as "realistic and flexible thoughts and acts that solve problems and thereby reduce stress" (p. 190). Coping has been further described as a multidimensional process (Lazarus & Folkman, 1977) having two broad categories: problem-focused coping which is aimed at changing the "troubled person-environment relationship" (p. 212) and emotion-focused coping which is directed at changing the meaning or perception of reality (Fredette, 1995; Lazarus & Folkman, 1977). These researchers agreed that the more healthy means of coping is the problem-focused form in which the individual seeks to adapt to the stressor by either attempting to change the situation or

by adapting oneself in necessary ways. The tendency of using emotion-focused coping has been to avoid reality by denying or altering one's own perception. Women with the diagnosis of breast cancer have been forced to deal with their illness and all of its implications. Coping strategies among breast cancer patients vary in use and effectiveness.

The concept of spiritual well-being, spirituality or the spiritual part of man has been listed in the concordance under the terms spirit and spiritual in the Open Bible (1985) and outnumber even such popular Christian terms as peace, love, and life. Spiritual well-being has been identified recently as a concept which has sparked renewed interest. A collapsed definition of the terms spiritual and well-being might be "health, happiness, or prosperity apart from bodily or worldly concerns" (Costello, 1995, pp. 1291, 1512). A recurring description of spiritual well-being has been that it is multifaceted, but has two main dimensions which encompass many others, the existential and the religious (Ellison, 1983; Moberg, 1984; Mickley et al., 1992). Most current researchers have referred to the existential dimension to imply a sense of life purpose and life satisfaction without religious implications and the religious dimension to describe a sense of well-being in relation to God (Ellison, 1983). Women with breast cancer, like all

people, have a measurable amount of spiritual well-being, both religious and existential (Ellison, 1983).

Some researchers have conducted studies which strongly suggest that there is a positive correlation between the concepts of coping and spiritual well-being. Kaczorowski (1989) concluded that high levels of spiritual well-being indicated lower levels of anxiety in adults with cancer. In a study by Landis (1996) spiritual well-being was found to be an important coping device used by patients in adjusting to the uncertainty associated with diabetes mellitus. Lastly, while developing a scale used to measure spiritual well-being, Ellison (1983) concluded that "self-esteem and SWB [spiritual well-being] have been found to be positively associated" (p. 335).

In accordance with the findings of these studies, the evidence strongly suggests that there may be a positive correlation between coping and spiritual well-being. The purpose of the present study was to investigate the relationship between coping and spiritual well-being in women with breast cancer.

Significance to Nursing

The spiritual variable is a necessary consideration for a truly holistic perspective of the client according to the Neuman Systems Model (Neuman, 1989). Neuman (1989) viewed the spiritual variable as being on a continuum of

development that permeates all other client system variables.

> The client/client system can move from complete unawareness of this variable's presence and potential, or even denial of it, to a consciously and highly developed spiritual understanding that supports client optimal wellness; that is, the spirit controls the mind and the mind consciously or unconsciously controls the body. (Neuman, 1989, p. 29)

The present study has important implications for nursing theory as it attempted to better define the effects of the spiritual variable on coping with breast cancer. These findings serve to strengthen Neuman's Client/Client Systems Paradigm and imply further use of the model for studies regarding spiritual well-being, coping, and breast cancer.

Studies have indicated that certain patients have a strong need and desire for their health care professionals to talk to them about spiritual matters and, at times, even pray with them (Berggren-Thomas & Griggs, 1995; King & Bushwick, 1994). One of the most powerful interventions indicated was a health care professional offering to be a good listener (Williams et al., 1995) or by exercising compassion and achieving a level of empathy with the client in his or her suffering (Berggren-Thomas & Griggs, 1995). "Whether it be through attentive listening, prayer for or with them or mere conversation, nurses allow their spirits to touch those of the clients' and assist them

along their path of spiritual growth" (Berggren-Thomas & Griggs, 1995, p. 9). Some implications for nursing education can be drawn from these findings. Information from this study may be used to teach novice nurses about tending to the spiritual needs of patients as well as teaching them about the physical aspects of nursing practice.

In order for the nursing community to gain knowledge that will ultimately improve quality of life for women with breast cancer, nursing science must gain information about coping and its relationship with spiritual well-being. If researchers are able to better measure and isolate those attributes and characteristics which define spiritual well-being and coping, interventions may be designed to encourage growth in both of these areas. Nurses have opportunities not afforded to many others. They see women with breast cancer at their best and at their worst. Nurses help patients and their families find meaning in pain and sickness and even in death. There are opportunities for ministry in all realms of nursing practice, such as giving physical comfort, providing emotional support, teaching in all areas of health care, and facilitating interventions which will strengthen both the coping skills and spiritual well-being of the patients and the patient's family. Spiritual well-being and coping have been determined empirically to have positive effects

on quality of life and health. Thus, the health community can acknowledge and integrate these variables into a variety of health care settings.

Theoretical Framework

The theoretical framework for this research was the Neuman Systems Model. Neuman (1989) illustrated the basis of her theory when she wrote,

> The Systems Model represents the client within the systems perspective wholistically and multidimensionally. It illustrates the composite of five interacting variables--physiological, psychological, sociocultural, developmental, and spiritual--ideally functioning harmoniously or stable in relation to internal and external environmental stressor influence upon the client, as a system, at a given point in time. (p. 25)

According to the model, spiritual belief influence was considered to be an innate component of the basic structure whether or not it was ever acknowledged by the client. Integrating the spiritual variable was believed to be necessary to obtain a truly holistic perspective of the client (Neuman, 1989).

Neuman's concepts particularly relevant to this study were those of wellness or health which she defined as "being on a continuum and dichotomous with illness" (Neuman, 1989, p. 33). She proposed that wellness existed when all variables which make up the client system interact harmoniously. The environment, as defined by

Neuman (1989), included "all internal and external factor influences surrounding the identified client or client system" (p. 31). These environmental influences may affect the client negatively or positively. Neuman also spoke of normal and flexible lines of defense and lines of resistance, all barriers designed to prevent stressors from penetrating the core of the individual. Breast cancer can certainly be deemed a major stressor to the woman who receives the diagnosis as well as a stressor to her significant others. Spiritual well-being and other coping responses can be labeled flexible lines of defense with the goal of protecting or buffering the woman's normal or stable state.

Interventions were identified by Neuman (1989) at three levels: primary, secondary, and tertiary prevention. Primary prevention occurred when a stressor was suspected but a reaction had not yet occurred. Secondary prevention involved treatments after the reaction had taken place. Tertiary prevention focused on readaptation and stability and tended to lead back toward primary prevention (Neuman, 1989). In this study, an attempt was made to expound upon this concept. The participants in this study were either in the secondary stage of prevention whereby they were actively undergoing treatment, or they were in tertiary prevention which focused on reconstitution and stability. Some of the women in the study were considered cured, but

all were striving to reach a level of normalcy in the face of great physical and emotional stress. Some type of coping and in many cases spiritual well-being was the tool used by the individual to reestablish and maintain stability and readapt to a changed environment. Because of the similarities identified between the concepts of Neuman's model and the variables of interest in this study, the model was considered to be an appropriate and workable framework on which to base this study.

Assumptions

"Assumptions refer to basic principles that are accepted on faith, or assumed to be true, without proof or verification" (Polit & Hungler, 1995, p. 10). For the purposes of this study, the following assumptions were made:

1. "Health for the client is equated with optimal system stability, that is the best possible wellness state at any given time" (Neuman, 1989, p. 33).

2. Breast cancer is a difficult and sometimes devastating diagnosis for a woman.

3. Coping is a phenomenon that occurs in all people, in some form, and can be measured.

4. Spiritual well-being is present in all beings, whether or not it is ever acknowledged by the person, and is a phenomenon that can be measured.

Problem Statement

Breast cancer has been determined to be a devastating diagnosis for a woman, yielding tremendous physical and emotional adjustments. Nurses have been challenged to assist these women to draw upon their own strengths in order to cope with the diagnosis. Studies have been done to examine how women cope with breast cancer, and some research indicates that spiritual well-being may be a factor. However, no studies were identified in which the specific relationship between spiritual well-being and coping in women with breast cancer was established. Therefore, the problem which was addressed in this research study was what is the relationship between spiritual well-being and coping in women with breast cancer?

Hypothesis

One hypothesis guided this study: There will be a significant positive correlation between spiritual well-being and coping in women with breast cancer.

Definition of Terms

For the purpose of this research, the following terms were defined:

Spiritual well-being: health or happiness apart from bodily or worldly concerns (Costello, 1995). Operationally, spiritual well-being was determined by the

scores on Paloutzian and Ellison's (1983) Spiritual Well-Being Scale which measured both religious and existential well-being.

Coping: contending or struggling successfully with difficulties and attempting to overcome them (DeVinne, 1990). Operationally, coping was determined by the scores on the Jalowiec Coping Scale (Jalowiec, 1987).

Women with breast cancer: women who self-reported a diagnosis of breast cancer, including those newly diagnosed as well as women several years post-diagnosis, including women who were considered cured and those who had active disease. Operationally, women with breast cancer were women between the ages of 21 and 90 years who were participants in breast cancer support groups, clients of two oncologists in the Jackson, Mississippi, area or women with a history of breast cancer who were identified by other women as possible participants.

Chapter II

Review of the Literature

Although much remains to be discovered about the concepts of spiritual well-being (SWB) and coping and the relationship between the two, researchers have suggested that a positive correlation exists. The review of the literature focuses on studies concerning coping, spiritual, and religious attitudes and SWB. The completed research pointed to a strong likelihood that the current study would reveal a positive correlation between coping and SWB in breast cancer patients.

Halstead and Fernsler (1994) studied the coping strategies of long-term cancer survivors. The researchers noted that more people survived the cancer diagnosis than in the past. The quality of life of the survivor had been greatly impacted by the long-term effects of the cancer diagnosis. Each had developed coping mechanisms in order to adapt to living with the uncertainty that cancer brought, and Halstead and Fernsler sought to describe the coping strategies of long-term survivors of cancer. The research questions were:

1. What coping strategies were used by long-term survivors of cancer?

2. How effective, as assessed by the long-term survivors, were the chosen coping methods?

Lazarus' Theory of Stress provided the theoretical framework for Halstead and Fernsler's (1994) study. According to Lazarus (cited in Halstead & Fernsler, 1994), the result of coping was the reduction of stress. Halstead and Fernsler explored two forms of coping as described by Lazarus, problem-focused coping and emotion-focused coping. Problem-focused coping was useful if the problem could be changed. When the problem was not able to be altered, emotion-focused coping was the better method.

A convenience sample (N = 59) was selected using the following criteria: (a) a diagnosis of cancer at least 5 years prior to the study; (b) the ability to read and write English; (c) not currently receiving chemotherapy, immunotherapy, or radiotherapy; and (d) not in a terminal stage of disease. The revised Jalowiec Coping Scale was used to measure use and effectiveness of coping strategies. A demographic data sheet also was included. Each potential participant received a packet and was asked to fill out the forms and mail them back to the researchers. Confidentiality was maintained by using code numbers.

Analysis of the data was done using descriptive statistics including means and percentages. Nearly half of the participants (47.5%) reported changes in coping since

diagnosed with cancer. The coping strategy used most frequently was praying or putting trust in God (67.8%) followed by trying to think positively (57.6%). Optimistic coping was the most frequently used coping style of the respondents (2.20 $\pm$ 0.54).

Analysis of variance (ANOVA) was used to determine differences in coping between age groups. The results indicated that age played a significant role in some of the coping styles, specifically the Optimistic, Emotive, and Palliative styles. A Tukey-b multiple comparisons test indicated that the older group used the optimistic and palliative coping strategies more than the middle-aged group. Emotive strategies were used more by the middle-aged group. Another ANOVA test showed significant differences in the coping effectiveness in the different age groups. The Tukey b demonstrated that the elderly group felt that the Optimistic, Palliative, and Supportant were more effective than the young and middle-aged groups.

The conclusions of the Halstead and Fernsler (1994) project suggested that long-term survivors of cancer endured a variety of stressors that required the use of coping to maintain equilibrium. This research supported Lazarus' Theory of Stress which stated that "coping alters the environment, resulting in a reduction in stress" (Halstead & Fernsler, 1994, p. 98). Most participants felt

that effective coping increased hope, did something about the problem, restored equilibrium, and used available support systems. Spiritual coping strategies were used and were deemed helpful by many of the subjects.

Halstead and Fernsler (1994) recommended further studies on coping in cancer patients as research in this area had been sparse. The reviewed study was particularly pertinent to the present study as virtually all the coping strategies identified were of a spiritual motive, either in the religious or existential sense.

Determining the coping strategies of survivors of breast cancer was the purpose of Fredette's (1995) study. Because the 5-year survival rate for breast cancer was among the highest of the cancers and the risk of developing breast cancer was 1 in 8 in the United States, Fredette predicted that this group would be expected to comprise a large percentage of survivors. Due to this, as well as a lack of nursing research in the area of coping and survivors of breast cancer, Fredette justified the purpose of the research which was to use the knowledge of coping strategies to improve the lives of survivors.

Fredette (1995) used the American Cancer Society's definition of survivor. "A survivor is a woman who has lived without recurrence for at least five years past initial diagnosis of breast cancer" (p. 36). Fredette described survivorship as the need for endurance, control,

patience, laughter, and hope in the journey of survival. The author equated the term "exceptional patient" (p. 36) with survivor and described survivor personality as one who manifested the will to live by taking charge of their lives and working to achieve health and peace of mind.

Fredette (1995) used several definitions of coping, including "a process of using specific tactics to bring about relief, quiescence and equilibrium" (p. 36). Coping with cancer was believed to be an extension of how well an individual coped during health.

Fredette (1995) relied upon coping research by Lazarus and Folkman who described two types of coping, emotion-focused and problem-focused. Emotion-focused coping involved a form of reality distortion in which the individual changed his or her perception of reality. In contrast, problem-focused coping was directed at changing the environment or self rather than one's perception of the reality.

A nonexperimental design was used by Fredette (1995). The convenience sample was obtained from four sources: newspaper advertisement, support groups, oncology nurse referrals, and subject referrals. The subjects (N = 14) consisted of women who had lived at least 5 years after a diagnosis of breast cancer and came from urban and rural areas of North Central Massachusetts.

The procedure of data collection involved a 1- to 2-hour interview which consisted of 14 open-ended questions devised by the researcher and a demographic data instrument to gather biographical information. The women were encouraged to expand on aspects that were most important to them.

Each interview was taped and transcribed using a dictaphone. Each participant had a series of index cards with each card containing one interview question. Two researchers independently recorded sentences, phrases, or words of the subject on each card. Consistency between the two researchers was evaluated by a third researcher and was found to be between 87% and 90%.

Findings of this descriptive research indicated that the majority of these women used problem-focused coping strategies, and most fit the definition of "the good coper" (Fredette, 1995, p. 40). Most felt that work, both inside and outside the home, gave "continuity and normalcy to life" (Fredette, 1995, p. 40). Spirituality was considered a powerful force by all 14 women. All cited aspects of religion, spirituality, prayer, meditation or God as a coping method.

Information-seeking about breast cancer was a major coping method used by 11 of the women. They obtained knowledge through reading, questioning of health care

providers, support groups, and talking with other patients.

Other significant, although less used, methods of coping used by the women of this study were support groups, family and friends, hopeful attitude, and solitary coping. Self-perception differed somewhat as all 14 of the women considered themselves survivors, whereas only 7 felt that they were cured. Most of the women described positive life changes as a result of living through a breast cancer diagnosis which ranged from more concern for others to reconsidered priorities.

Fredette (1995) examined a group of 14 white, well-educated women who volunteered to participate in her study. Fredette recommended that her findings provided direction for further study such as replication to include women of different cultures, geographic locations, and educational levels. A replication with survivors who had a recurrence also was recommended for future research.

King and Bushwick (1994) contended that physicians rarely talked to their patients about spiritual or religious matters. The purpose of their research was to determine whether patients wanted their physicians to discuss religious concerns with them. The research was based in part upon the assumption that physician attention to patients' religious concerns may result in improved patient care.

King and Bushwick's (1994) hypothesis was that patients want physicians to discuss religious beliefs and the role of prayer and faith in their healing, and that the presence of certain factors can predict which patients are more likely to want such a discussion. These researchers used a cross-sectional survey with inpatients at hospitals in North Carolina and Pennsylvania. Patients were either hospitalized for at least 3 days on the family practice service or for at least 2 days on an obstetrics-gynecology service. Other eligibility criteria for the study were that patients be at least 18 years old and able to communicate effectively.

Respondents answered a demographic data questionnaire which included items about religious beliefs and attendance at religious services. Patients were asked about previous experiences with faith healing and prayer and whether their physician spoke about their religious beliefs. Attitudes about prayer and faith in healing were assessed using a Likert-type scale.

King and Bushwick (1994) had a research assistant administer the questionnaire in the patient rooms after consent was given by the physician and the patient. The study included 203 patients. The sample's mean age was 48 in the North Carolina hospital and 61 in the Pennsylvania hospital ($p < .001$). Respondents who said they believe in God were 98%, 58% were "very strong" in their beliefs, and

35% were "somewhat strong." Particularly noteworthy to this researcher was the finding that 94% agreed that spiritual health is as important as physical health.

Another finding of King and Bushwick's research was that many patients expressed a desire for physician involvement in spiritual matters. "Forty-eight percent said that they would like their physician to pray with them" (p. 350). Patients desired that their physicians should consider their patients' spiritual needs (77%) and 37% wanted their physicians to discuss their religious beliefs more. Of the surveyed patients, 68% reported that their physicians had never discussed religious beliefs with them, and 12% said they rarely discussed them.

King and Bushwick (1994) found that attendance at a faith-healing service was a predictor of other attitudes about prayer and physician involvement in religious issues. Of the patients who had attended a faith-healing service, 63% wanted their physician to pray with them; of those who had not attended a faith-healing service, only 37% desired prayer with their physician ($p = .002$).

The data collected by King and Bushwick (1994) supported the hypothesis that some patients want to discuss their religious beliefs and the role of faith and prayer in their healing with their physician. Participants who had attended faith-healing services were more likely to want such discussion. Recommendations were made for

similar research in various parts of the country to determine if similarities existed. The authors also suggested exploration into various ways of addressing the role of prayer and faith in healing to provide the most beneficial care to patients.

The study demonstrated that some patients clearly desire to have their spiritual needs addressed by their health care provider. This research revealed that many patients feel that spiritual health is as important as physical health. Addressing these needs, especially to patients who express the desire for, would be a positive way for the health care provider to encourage spiritual growth.

Craig Ellison wrote "Spiritual Well-Being: Conceptualization and Measurement" in 1983, and although many years have passed, the paper remains an important resource. Ellison's purpose was to measure an elusive phenomenon. Ellison wrote that SWB

> . . . arises from an underlying state of spiritual health and is an expression of it, much like the color of one's complexion and pulse rate are expressions of good health. Spiritual well-being measures may then be seen more like a stethoscope that like the heart itself . . . We are freed to consider the reported expressions of SWB as general indicators and helpful approximations of the underlying state. (p. 332)

Other researchers had established that income and material goods were not clearly linked to positive

well-being. The "need for relating" which dealt with social relationships, and the "need for being," which had to do with a sense of satisfaction with one's self were determined to be more important elements in one's positive well-being than was the "need for having" (Ellison, 1983).

While Ellison (1983) did not disagree with previous researchers' findings, he contended that they did not go far enough in their research. He claimed that an equally important element was the "need for transcendence" which referred to the sense of well-being that individuals experienced when they found purposes to commit themselves to which involved ultimate meaning for life. He referred to this dimension of awareness and experience as spiritual. Ellison asserted that the spiritual dimension was an important and yet often ignored human dimension.

Ellison (1983) claimed that the definition of SWB was imprecise and difficult to operationalize. In an attempt to define SWB, the researcher quoted the National Interfaith Coalition on Aging: "SWB is the affirmation of life in a relationship with God, self, community and environment that nurtures and celebrates wholeness" (p. 331). This definition suggested that SWB involved a religious (vertical) component which referred to one's sense of well-being in relation to God and a social-psychological component (horizontal) which referred to a sense of life purpose and satisfaction and has no

reference to anything specifically religious. Ellison stated that both dimensions involved transcendence and predicted that there would be some statistical overlap.

Ellison (1983) believed that the spiritual dimension did not exist in isolation, but rather affected and was affected by psychological and physical states. He contended that SWB was not the same as spiritual health, but that rather SWB was an expression or measurement of one's underlying spiritual health.

Ellison and Paloutzian (1983) developed an instrument which would measure SWB called the Spiritual Well-Being Scale (SWBS). Ellison observed that the instrument provided a general measure and was not related to individual denominations or theologies. Ellison believed that the scale could be administered fairly to Catholics, Protestants, Jews, and others who conceived of God in personal terms. Eastern religions could also use the scale if they were able to meaningfully interpret the statements about relationship with God.

Ellison's (1983) article was a composite of many studies involved in the development and testing of the SWBS. A series of studies involving more than 500 individuals of all ages, sexes, and occupations were performed which examined the relationship of SWB to many developmental and social-psychological indicators. The studies involved basically healthy people. Self-esteem and

SWB were found to be positively associated. SWB and intrinsic religious orientation were highly correlated, $r(164) = .67$, $p < .001$. Studies also demonstrated that there was a positive relationship between SWB and religious beliefs and practices which focus on the affirmation and valuing of the believer, $r(68) = .68$, $p < .001$. SWB was related positively to the grounding of one's own positive self-evaluation of God's acceptance, $r(68) = .60$, $p < .001$.

Ellison (1983) echoed the theories of others when he wrote that human beings are multidimensional systems with several interactive subsystems which affect each other. "At a minimum human beings are biological, cognitive, interpersonal, emotional and spiritual beings. As a result, our sense of SWB is in part a reflection of those other dimensions" (pp. 336-337).

Recommendations were made by Ellison (1983) for further study concerning SWB and the SWBS. He suggested further study relating SWB to other sense-of-well-being measures (e.g., coping). Also suggested were studies measuring SWB and values, SWB and personality measures, and more importantly, SWB and physical health.

Ellison (1983) was convinced that SWB was as important an element in individuals' total sense of well-being as physical or psychological factors. In his writings, he enthusiastically urged fellow researchers to

continue the quest of discovering and measuring empirically this often overlooked phenomenon. The goal of this research was to develop more sensitive measures to identify specific SWB dimensions in hopes that one day the helping professions would be able to nurture the spiritual side of humans and in fact even prescribe "spiritual medicine" (Ellison, 1983, p. 332). Thus, the current research was an attempt to correlate the concepts of SWB and coping in order to benefit those women diagnosed with breast cancer.

Kaczorowski (1989) explored the relationship between SWB and anxiety in adults diagnosed with cancer. The author defined anxiety as "a variable combination of emotion-related responses to situations perceived as threatening to self-esteem or well-being" (p. 106). SWB was defined as "the incorporation of existential and religious dimensions of spirituality" (p. 106).

Kaczorowski (1989) used a correlational study involving a convenience sample of 114 persons with different types of cancer at various stages of diagnosis. Of the participants, 30 had been diagnosed within the year prior to the study, 45 from one to 5 years, and 38 more than 5 years. The instruments used to ascertain data were the State-Trait Anxiety Inventory and the Spiritual Well-Being Scale, as well as a demographic data sheet. Data were collected from clients identified by oncologists and

nurses, completed at home, and mailed to the researcher. Data analysis revealed a significant inverse relationship in the total sample when anxiety was correlated with SWB (r = -.44, p = .001).

Kaczorowski (1989) concluded that persons with high levels of SWB had lower levels of anxiety. Recommendations for further studies in the area included concentrating on particular features of a group such as a specific diagnosis, stage of disease and treatment, as well as demographic characteristics. This study provided both information and direction for further inquiry.

Carson, Soeken, shanty, and Terry (1990) investigated the relationship between hope and SWB in persons who were positive for the Human Immunodeficiency Virus (HIV+) or diagnosed with AIDS Related Complex (ARC) or Acquired Immunodeficiency Deficiency Syndrome (AIDS). The researchers declared that the impetus for the study was twofold:

1. Due to the distinctive characteristics of the disease (transmissible, terminal, and stigmatizing), research needed to be directed not only toward a physical cure, but also toward ways to strengthen the spiritual and psychological resiliency of affected persons.

2. Spirituality was a worthwhile research pursuit as it contributes to both physical and psychological well-being.

The distinct characteristics of AIDS place an unusual burden on its sufferers. As well as being incurable and terminal, many times its victims are left to struggle in isolation. Social supports are frequently withdrawn, and AIDS patients are forced to face existential issues, such as the meaning of life and the purpose of illness in isolation. Compounding this frequently, especially in homosexuals and IV drug users, is the guilt they often experience as a result of life choices. The researchers asked the question: Given these factors, are persons with AIDS (PWAs) able to achieve a sense of SWB and hope? No prior studies had been done dealing with these variables in PWAs, and the researchers desired to determine the roles of SWB and hope in PWAs.

The sample for this study consisted of 65 adult male patients recruited through an outpatient clinic which treated patients known to have HIV antibodies. The majority of the patients were in high-risk groups (homosexuals, bisexuals, IV drug users, or a combination of these), 3 subjects were in the no risk group, and 2 subjects failed to respond to the question.

Hope was measured using the Beck Hopelessness Scale, which consists of 20 true-false questions assessing feelings about the future, expectations, and loss of motivation. A high score indicated pessimistic feelings, and a low score indicated optimism. Reliability of the

scale for the study was .91 as assessed using coefficient alpha.

The SWBS was used to measure two dimensions of SWB: existential well-being (EWB) and religious well-being (RWB). The SWBS consists of 20 items on a Likert scale; among this particular sample the reliability was .94 for SWB, .92 for RWB, and .93 for EWB. EWB is the individual's sense of purpose in life and life satisfaction. RWB is the sense of well-being in relation to God.

The procedure used was to approach the men while they were in the outpatient clinic and ask them to volunteer for the study. The questionnaires were completed while they waited to be seen by the physician. Analyses were done by descriptive statistics, Pearson correlation coefficients and multiple regression analysis.

Major findings included overall that subjects scored high levels of hope or optimism. Overall positive levels of SWB were revealed. Patients diagnosed with AIDS were significantly more hopeful than those diagnosed with ARC (4.0 versus 8.9, $p < .05$). Pearson correlation coefficients were computed which revealed that hope correlated significantly with SWB ($r = -.63$, $p < .05$). This finding indicated that those participants who were higher in SWB also were higher in hope. The same was true of the relationships between hope and RWB ($r = .34$) and hope and EWB ($r = .79$). The relationship between hope and

EWB was more significant than the relationship between hope and RWB (t = 6.72, df = 62, p < .001).

Carson et al. (1990) noted that participants in their study were being treated at a world renowned AIDS treatment center. The researchers conceded that possibly these participants' source of hope lie partly in faith in the medical system and modern technology. Another setting might produce different levels of hope and SWB in HIV+, ARC, and AIDS patients.

PWAs, due to the acquisition of their disease and the lifestyle choices made, often feel unworthy, alienated from organized religion. Their strength is found more in the existential element than in religion. Although there is no physical cure available for this devastating disease, these researchers found that this group of PWAs possessed a survivor's attitude, evidenced by their ability to respond to the existential challenge of their disease.

Carson et al. (1990) challenged members of the health community to reflect upon God's unconditional love and encouraged those in helping professions to be compassionate, transcend prejudice and be understanding of all, even those with AIDS. The relationship between hope and SWB was found to be statistically significant. The researchers encouraged the health community to utilize that information to encourage PWAs into those pursuits

which bring about greater meaning to their lives, their sufferings, and even their deaths.

Landis (1996) determined that only beginning work had been done on assessing SWB as a coping resource for chronically ill patients and that long-term effects of uncertainty on psychosocial adjustment of adults with chronic illnesses had not been adequately studied. The purpose of Landis' research was to examine relationships among uncertainty, SWB, and psychosocial adjustment to chronic illness.

Three hypotheses were tested:

1. There will be a significant negative relationship between uncertainty and SWB in adults experiencing a chronic illness.

2. There will be a significant negative relationship between SWB and psychosocial adjustment problems in adults experiencing a chronic illness.

3. SWB will have a significant mediating effect on psychosocial adjustment problems in adults experiencing uncertainty with a chronic illness.

Landis (1996) defined uncertainty as "a cognitive state in which one is unable to assign meaning to an event which limits the ability to mobilize suitable coping resources" (p. 219). Psychosocial adjustment was defined by Landis as a coming to terms with the reality of chronic illness, restructuring one's environment.

SWB was defined as having two dimensions: a vertical component, religious well-being (RWB), which represents one's relationship with God, and a horizontal component, existential well-being (EWB), which is related to a sense of life's purpose and satisfaction. Landis used modeling and role-modeling for her theoretical framework.

The researcher used a descriptive correlational design to study the relationships and test the hypotheses. A nonprobability sample consisting of 94 patients with the diagnosis of diabetes mellitus (Types I and II) was selected. Subjects were recruited in clinics, physicians' offices, support groups, and from within the community. Four instruments were used for data collection:

1. The Mischel Uncertainty in Illness Scale-Community Form with an alpha coefficient of .92 for the sample.

2. The Spiritual Well-Being Scale (SWBS). Alpha reliabilities were .96 for total SWB, .94 for RWB, and .93 for EWB.

2. The Psychosocial Adjustment to Illness Scale-Self Report. Overall alpha coefficient for the sample was .96.

4. A sociodemographic data sheet developed by the researcher.

Pearson r coefficients were used to analyze Hypotheses I and II. Hypothesis III was tested using hierarchical multiple regression procedures.

Landis (1996) reported that Hypothesis I was supported: There was a significant negative relationship between uncertainty and SWB (r = -.499, p = .000). Hypothesis II also was supported: There was a significant negative relationship between SWB and psychosocial adjustment problems (r = -.475, p = .001). Finally, Hypothesis III, SWB would have a significant mediating effect on psychosocial adjustment problems, was supported.

Conclusions reached by Landis (1996) included the evidence that uncertainty was a stressor which had a negative influence on psychosocial adjustment and that SWB was an important internal coping device which lessened the effects of uncertainty and adjustment problems. The study demonstrated that SWB may be an important factor in increasing psychological well-being, increasing hope, and improving quality of life which "implies that whatever would strengthen one's SWB in general and his or her meaning and purpose in life in particular, would reduce distress and positively affect overall adjustment to diabetes" (p. 220).

Recommendations for nurses were made in the area of spiritual interventions. Landis described the most important interventions as the nurse's own presence and listening skills. Fostering family relationships and promoting family involvement also were recommended as supportive care offered by nurses, which would strengthen

the SWB of the patient. Landis recommended that further studies be performed in the area of human spirituality and health with the goal of advancing holistic nursing practice.

Mickley, Soeken, and Belcher (1992) sought to clarify spiritual health by looking at the related phenomena of SWB, religiousness, and hope. The questions posed were the following:

1. How is spiritual health related to religion?

2. What is the relationship between spiritual health and psychological health?

3. What role does spiritual health play in the coping responses of patients to devastating physical illness?

SWB has been described as the best indicator of spiritual health. The concept of SWB has frequently been described as multidimensional, the existential and the religious as the two most frequently cited components. The existential (EWB) referred to a sense of meaning and purpose in life; the religious (RWB) focused on a relationship with God. The Paloutzian and Ellison SWB scale was used to measure both elements of SWB.

Religiousness was defined by Mickley et al. (1992) as the personal meaning that individuals attach to a particular system of beliefs, values, rules of conduct, and rituals. Religiousness was divided into two broad dimensions: (a) intrinsic religiousness which referred to an internalization of one's religious creed or living for

one's faith and (b) extrinsic religiousness in which one tends to use religion as a tool to provide sociability and security. Those who tended to be more intrinsic in their religious interpretation were predicted to be more psychologically healthy. The Feagin Intrinsic/Extrinsic Religiousness Scale was used to measure religiousness.

Hope was defined by Mickley et al. (1992) as "a multidimensional dynamic attribute of an individual which includes the dimensions of possibility and confidence in a future outcome, active involvement which comes from within, relations with others and spiritual beliefs" (p. 268). This definition addressed both religious and secular concerns. The Nowotny Hope Scale was used to measure level of hope. Although hope and the other variables had been previously studied, the Mickley et al. investigation was the first study which examined the relationships among the three variables.

The research design for the Mickley et al. (1992) study was nonexperimental. The target population was women with breast cancer. The sample was obtained using convenience sampling at two outpatient oncology treatment centers in Texas. A demographic and medical data questionnaire was given to the participants as well as the three scales. The total sample consisted of 175 women ranging in age from 29 through 89 years of age who, after consenting to the study, were each given a packet of

questionnaires which they filled out in the office or took home to complete and mail to the researchers.

The researchers determined that the means of SWB, RWB, and EWB suggested an overall positive level for SWB for the sample. Likewise, the sample demonstrated an overall hopeful level based on a mean of 95.4 on the hope scale. Using the median split technique, women who were intrinsically religious tended to have higher SWB scores (t = 4.73, p < .001). In contrast, women who were intrinsically religious did not have higher hope scores than women who were extrinsically religious. This finding was determined by using a paired t test (t = 1.94, p > .05). Hope was positively correlated with intrinsic religiousness (r = .363, p < .001), meaning that women who reported higher levels of hope also had higher levels of SWB. Multiple regression analyses were performed to examine more closely the relationship between SWB and hope. The only significant variable seemed to be EWB. "There does not appear to be a direct relationship between age and hope, religiousness and hope, or date of diagnosis and hope" (p. 270).

Mickley et al. (1992) drew several important conclusions from the findings. Women who scored higher on the SWB scale were more intrinsically religious. Medical variables were not significantly related to SWB, religiousness, or hope. In other words, the patient's

medical prognosis was not related to the degree of SWB or psychological health. There was found to be a significant relationship between hope and SWB which indicated that SWB may be an important coping response. Because of this conclusion, Mickley et al. recommended that further research on spiritual health be conducted.

In summary, research pertinent to SWB and coping was reviewed. Examination of the literature consistently revealed that SWB and coping might be linked in some way in all clients with acute and chronic illnesses (Carson et al., 1990; Fredette, 1995; Halstead & Fernsler, 1994; Landis, 1996). The review of literature indicated a connection between SWB and other positive indicators which are beneficial to patients' overall health (Ellison, 1983; Kaczorowski, 1989). Some studies showed that many people cope in healthy ways by using prayer, Bible study, and other spiritual or religious activities (Fredette, 1995; King & Bushwick, 1994). Based on the review of literature, this researcher concluded there was a likelihood that a correlation would be found between SWB and coping in women with breast cancer. In order to establish an empirical link, SWB and coping in women with breast cancer evolved as the focus of the study.

Chapter III

The Method

The purpose of this study was to determine if there was a correlation between spiritual well-being (SWB) and coping in women with breast cancer. Based on previous studies, it was predicted that many women who face a cancer diagnosis and who cope with the diagnosis in a healthy manner also have a high level of spiritual well-being. In Chapter III the methods used to describe the variables of interest for this study are described.

Design of the Study

The research design of this study was descriptive correlational. "The aim of descriptive correlational research is to describe the relationship among variables" (Polit & Hungler, 1995, p. 178). Therefore, no causal relationship between the variables was implied.

Variables. The variables which were examined were spiritual well-being and coping. In this study the first variable of interest was the level of spiritual well-being in women with breast cancer as identified by Paloutzian and Ellison's Spiritual Well-Being Scale (SWBS). The second variable of interest was the level of effective coping by women with breast cancer as measured by scores

on the Jalowiec Coping Scale (JCS). One controlled variable was that the participant had the diagnosis of breast cancer at some time and the other was age. Mediating variables included the time since diagnosis, whether or not the woman was considered cured, her support systems and her age and/or stage in the life cycle. Truthfulness when answering the questionnaires was another mediating variable.

Setting, Population, and Sample

The setting for the research study was the Jackson, Mississippi-Metro area. The American Cancer Society, Mississippi Division, predicted that 470 women in Mississippi died from breast cancer and that 1,700 new breast cancer cases were reported in 1995 (American Cancer Society, 1995b). The population consisted of women living in the Jackson-Metro who were identified as having breast cancer at some time and were between the ages of 21 and 90 years. A convenience sample was used by obtaining participants who met the criteria and were willing to participate from a breast cancer support group, two Jackson-based oncologists, and by participants suggesting other potential participants.

Treatment options, time since diagnosis, success of treatment, and other criteria were inquired about, but were not considered as eligibility criteria in the study. The actual sample included 31 women.

Methods of Data Collection

Instrumentation. The packet that each participant received consisted of three instruments as well as a letter of introduction and consent. The first instrument was an 11-item researcher-designed demographic data sheet (see Appendix A) which sought information, such as age, marital status, time since diagnosis, and treatment options. The remaining six questions were open-ended to offer each participant an opportunity to share her experience.

The second instrument used for data collection was the Spiritual Well-Being Scale designed by Paloutzian and Ellison (1983), which is a 20-item scale used to measure spiritual well-being (copyright material). This scale provides an overall measure of spiritual quality of life, as well as subscale scores for religious and existential well-being. The religious well-being (RWB) subscale assesses one's relationship with God, and the existential well-being (EWB) subscale gives a self-assessment of one's sense of life purpose and life satisfaction.

Scoring for the SWBS was done using a Likert-type format. Each question ranged from one to six points, with a higher number representing greater well-being. Negatively worded items were inversely scored. Even-numbered items assessed existential well-being. The score was computed by summing the even-numbered items; possible

scores ranged from 10 to 60. Religious well-being was assessed by using the odd-numbered items. Summing the total odd-numbered items yielded a RWB score which also ranged from 10 to 60. The overall SWB score was computed by summing the responses to all 20 items, with possible scores from 20 to 120. The higher the score on either subscale or a sum of both the subscales indicated a higher level of spiritual well-being.

The SWBS has been shown to have adequate reliability. Coefficient alpha, a measure of internal consistency, was above .84 in seven samples (Bufford, Paloutzian, & Ellison, 1991). "Validity involves the question of whether a scale measures what it purports to measure. The initial construction of the SWBS insured that it has good face validity" (Bufford et al., 1991, p. 57). Subsequent research has shown that the SWBS is a good general index of spiritual well-being.

The third instrument used for data collection was the Jalowiec Coping Scale (JCS). The JCS, developed and modified by Jalowiec (1987), was designed to measure the use and effectiveness of 60 coping strategies (see Appendix B). The test was designed for use by adults of all ages and reads on a sixth-grade level.

The 60 items are classified into eight coping styles: Confrontive, Evasive, Optimistic, Fatalistic, Emotive, Palliative, Supportant, and Self-Reliant (see Appendix C).

The instrument has two parts which examine how often each coping method is used, and if used, how helpful is that same coping method. Items are rated on a 4-point Likert scale ranging from never used (0) to often used (3) to measure coping strategies used and not helpful (0) to very helpful (3) to measure the effectiveness of the coping method. The coping style use and effectiveness scores were calculated by dividing the scores of related questions by the total number of items possible for that particular coping style. The coping styles are surmised to be distinctive and may be measured independently as well as combined.

Scores were calculated by summing the use ratings for all items within a given coping style. The mean use score was determined by dividing the use score for a given coping style by the total number of items possible for that coping style. Effectiveness scores were determined by summing the effectiveness ratings for all items within a given coping style. Mean effectiveness scores were determined by dividing the effectiveness score for a given coping style by the total number of items possible for that coping style. The overall use and effectiveness scores had an absolute range from 0 to 180. The higher mean scores indicated a higher use and helpfulness of each style.

The stability of total use of the JCS ranged from .56 to .69. Content validity was supported by broad literature/empirical base. The content validity index for eight subscales was .85, which showed support for relevance of items to each subscale. The total SWB score was correlated with total use and total helpfulness scores on the JCS. Additionally, each of the SWB subscales was correlated with each of the eight coping styles as described by Jalowiec (1987) to determine statistical significance.

Procedures

The researcher initially contacted Drs. Anne Jalowiec and Craig Ellison, the authors and developers of the two instruments used in the research study, to obtain permission to use their instruments. Permission was granted (see Appendices D and E). An application was prepared and sent to Mississippi University for Women Committee on Use of Human Subjects in Experimentation for approval of the study. Approval to proceed with the study was received (see Appendix F). Questionnaire packets were collated consisting of a letter of introduction and consent (see Appendix G), a demographic data sheet, the SWBS, the JCS, and a self-addressed, stamped envelope.

Two local oncologists agreed to distribute the packets to patients who fit the criterion of having a breast cancer diagnosis. In one office, the nurse asked

the patient if she would be willing to participate, and if so, the patient was given a packet to complete while waiting to see the physician or to take home to complete and mail back to the researcher. In the other office, the physician felt that patients' admiration and fondness for their nurse would influence their decision to participate, so in that office a basket of packets was made available on a table in the waiting room as well as a brief invitation and explanation of the study. The patients were given an opportunity to complete them while receiving their IV chemotherapy in the office or take them home to complete and mail to the researcher.

Other subjects were selected through referral to the researcher by friends, family, or acquaintances of breast cancer patients. In most cases, a telephone call was made to potential participants to secure verbal permission to participate as well as to alert the participant of the packet's impending arrival. These packets were returned via self-addressed stamped envelopes to the researcher. In a few cases, a follow-up phone call served as a reminder.

Still other participants were secured through a cancer support group. The group's leader, identified by the local American Cancer Society chapter, was contacted via telephone as well as a handwritten note. At the meeting the leader invited breast cancer patients to take part in the study by completing the questionnaires. The

packets were completed at the patients' homes and mailed to the researcher. Data collection occurred during April and May 1996.

Methods of Data Analysis

Data obtained from the demographic questionnaire, the JCS, and the SWBS were tabulated and analyzed using descriptive statistics including means and frequency distributions. The Pearson product-moment correlation was used to determine whether a significant relationship existed between coping and SWB in women with breast cancer. Additionally, total usage and helpfulness scores also were correlated using the Pearson *r*. Content analysis was done on the open-ended questions for recurring themes from the demographic questionnaire.

Chapter IV

The Findings

The purpose of the present study was to determine if there was a significant correlation between spiritual well-being (SWB) and coping in women with breast cancer. Previous studies suggested that there might well be a positive relationship between one's SWB, both existential and religious, and the way in which one copes with chronic or life-threatening illness (Kaczorowski, 1989; Landis, 1996; Mickley et al., 1992).

The data for this study were obtained using three instruments: an author/researcher-designed demographic questionnaire, the Paloutzian and Ellison Spiritual Well-Being Scale, and the Jalowiec Coping Scale. Questionnaire packets were distributed to prospective subjects via two oncologists' offices, a breast cancer support group, and by the researcher. Some of the surveys were mailed as far away as Alabama and California to women with the breast cancer diagnosis identified by family members and friends living in the Jackson-Metro, Mississippi area. A convenience sample of 31 women was utilized. In this chapter the data collected and analyzed for the study are presented. The sample will be described, followed by the

results of data analyses in relation to the research hypothesis.

Description of Sample

Forty-one women responded to the study by completing and returning the questionnaire packets during the months of April and May 1996. Three of the women responded after data collection was completed. Seven of the respondents did not complete all parts of the questionnaires; therefore, their responses had to be discarded as there was inadequate information for correlation. Of the remaining 31 respondents, 30 completed the questionnaires properly while one woman responded to all questions except the helpfulness scale of the JCS. As a result, the sample size for most of the findings was $n = 31$, helpfulness of coping strategies, $n = 30$.

The majority (87%) of the women who participated in the study were white and 4 (13%) were black. Twenty-three (74%) of the respondents reported that they were married, one individual was single (3%), and one was divorced (3%). Six respondents (19%) were widows. The length of time since diagnosis ranged from 2 months to 19 years with a median of 3 years. Eleven respondents (35%) reported that they had received their diagnosis less than one year before this study was conducted.

Various treatment options were experienced by participants in the study. Twenty-eight (90%) reported

having a mastectomy, which was the most common intervention reported. The second most frequently used treatment modality was chemotherapy (74%). Seven participants (23%) reported having a lumpectomy, 7 (23%) experienced radiation as treatment for the disease. Reconstructive surgery was performed on 29% of the women in the study. Fourteen of the participants (45%) reported that they were presently undergoing treatment for cancer, either for original diagnosis or for recurrence or metastasis.

Every participant reported having religious affiliation, although denominations and frequency of attendance varied. One participant wrote that she had been a Catholic, but was no longer practicing her religion in any formal sense. The ages of the participants ranged from 30 years to 75 years (M = 54.4, SD = 11.17).

Results of Data Analysis

The Pearson product-moment correlation coefficient was performed to correlate the total SWB score with the total use and helpfulness coping scores. Both the religious and existential subscales of the Spiritual Well-Being Scale (SWBS) were correlated with each of the eight coping styles defined by the Jalowiec Coping Scale (JCS).

No significant correlation was found between total SWB scores and total coping use scores on the JCS,

$r(30) = .23$, $p = .102$; therefore, the research hypothesis was rejected. However, SWB scores and total coping helpfulness scores on the JCS approached statistical significance, $r(29) = .27$, $p = .074$; and when specific coping styles were correlated, several areas of significance and near significance emerged.

The total SWB scores were shown to have a significant negative relationship when correlated with fatalistic coping style, $r(30) = -.33$, $p = .034$. The negative correlation indicates that participants who had high levels of SWB rarely utilized the negative style of coping. Another statistically significant finding was that both religious and total SWB were positively correlated with the supportant coping style, $r(30)= .38$, $p = .018$, $r(30) = .35$, $p = .027$, respectively. Positive correlations were found between high levels of SWB and the helpfulness of the optimistic and supportant coping styles.

Tables 1 and 2 illustrate the correlations between SWB and coping styles. The statistical analysis yielded some significant relationships between total SWB and one or both of the SWB subscales and various coping style usage and effectiveness.

Table 1

Correlations Between Spiritual Well-Being and Coping Style Use

	Total SWB		EWB		RWB	
Style	*r*	*p*	*r*	*p*	*r*	*p*
Total	.234	.102	.130	.243	.260	.079
Confrontive	.140	.226	.266	.074	-.009	.482
Evasive	-.013	.473	-.244	.093	.193	.149
Optimistic	.263	.076	.164	.188	.276	.066
Fatalistic	-.333	.034*	-.446	.006*	-.141	.225
Emotive	-.063	.368	-.022	.453	-.082	.331
Palliative	.098	.300	-.007	.486	.162	.192
Supportant	.349	.027*	.204	.136	.379	.018*
Self-reliant	.104	.288	.014	.471	.155	.203

Note. *N* = 30. SWB = Spiritual well-being. EWB = Existential well-being. RWB = Religious well-being.
*$p \leq .05$.

Table 2

Correlations Between Spiritual Well-Being and Coping Style Helpfulness

	Total SWB		EWB		RWB	
Style	*r*	*p*	*r*	*p*	*r*	*p*
Total	.270	.074	.235	.105	.219	.122
Confrontive	.152	.211	.282	.065	.001	.499
Evasive	.163	.195	.020	.458	.232	.108
Optimistic	.392	.016*	.379	.019*	.287	.062
Fatalistic	-.172	.181	-.321	.042*	.001	.498
Emotive	.008	.483	.173	.180	-.130	.246
Palliative	.107	.286	.048	.401	.124	.256
Supportant	.373	.021*	.278	.069	.342	.032*
Self-reliant	.299	.054	.195	.152	.297	.056

Note. *N* = 30. SWB = Spiritual well-being. EWB = Existential well-being. RWB = Religious well-being.

*$p \leq .05$.

Additional Findings

Participants in the research study demonstrated fairly high levels of SWB. The absolute range of scores for total SWB was 20 to 120, while the actual range was 64 to 120. The mean total SWB score was 109.6, *SD* = 13.6. Seven (23%) of the respondents recorded a perfect score of 120.

The SWBS consists of two subscales which when summed yield a total SWB score. The existential well-being (EWB) subscores had an actual range of 37 to 60. The mean EWB score was 53.1, *SD* = 7.45. EWB implies a sense of life purpose and satisfaction. The religious well-being (RWB) scores, which describe a sense of well-being in relation to God, reflected a mean of 56.48, *SD* = 8.5, with an actual range of 16 to 60. The absolute range for each of the subscales was 10 to 60.

The coping style most often used by respondents in this study was the optimistic style (Use, *M* = 2.45, *SD* = .37; Help, *M* = 2.18, *SD* = .55) (see Figure 1). Optimistic coping is defined by Jalowiec (1987) as "positive thinking, positive outlook. Five of the items listed under optimistic coping style were cited as "often used" by at least 60% of the respondents, and four of the same items were marked as "very helpful" by at least 60% of respondents (items 30, 39, 47, and 50).

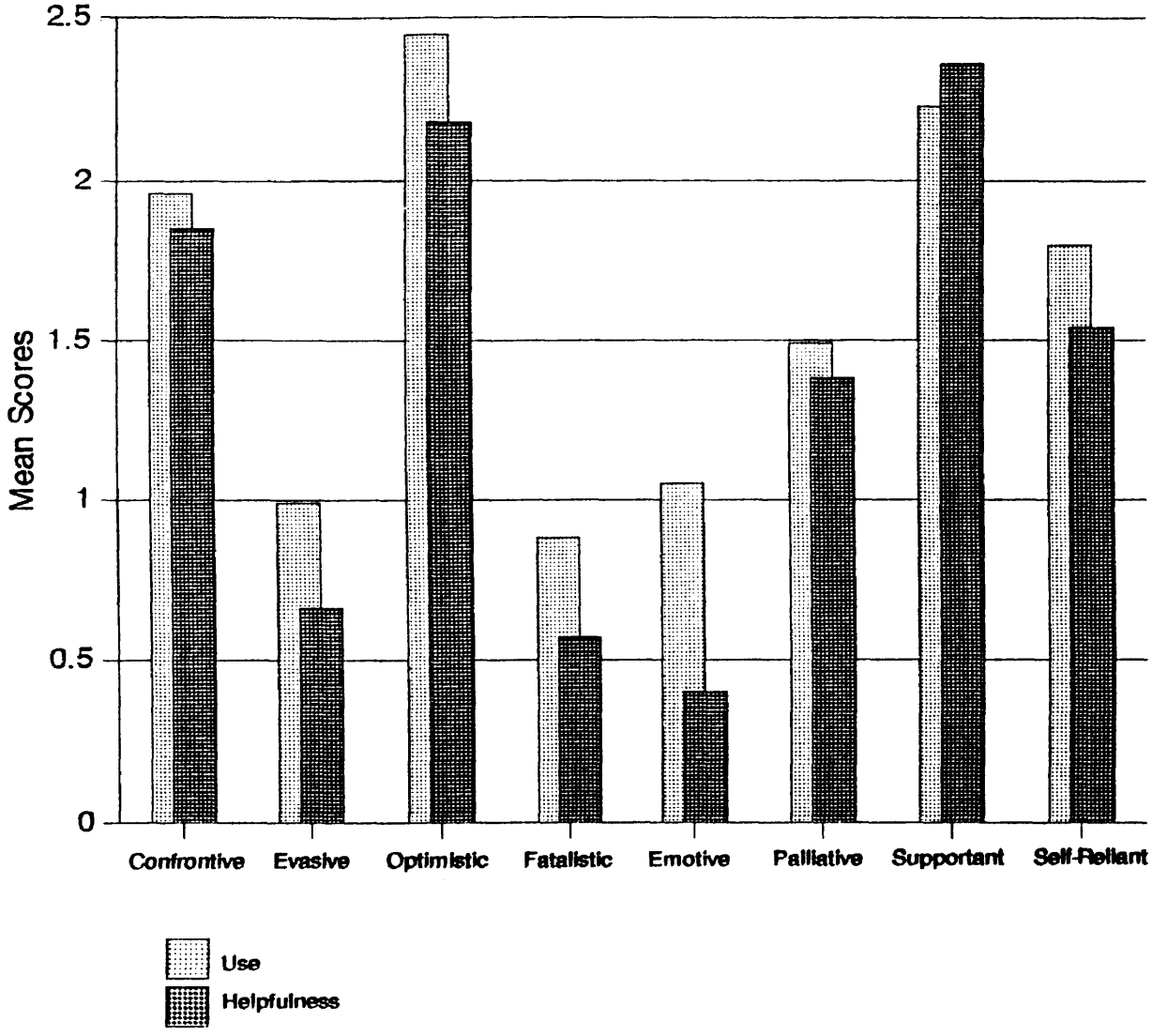

Figure 1. Coping use and helpfulness mean scores (Range 0-3).

The second most frequently used coping style was the supportant coping style (Use, M = 2.23, SD = .51; Help, M = 2.36, SD = .47). Two of the items (items 11 and 17) were rated by respondents as "often used" by at least 65%, and four of the times were rated as "very helpful" by at least 50% of the respondents (items 11, 15, 17, and 42).

The coping strategies cited most often in this research were item 17, "prayed or put trust in God," and item 30, "tried to think positively." Each method was reportedly used by 90% of the respondents, with item 17 slightly more helpful than item 30 (93% vs. 90%) (see Table 3).

Conversely, the coping style selected least often by respondents for use or helpfulness was the fatalistic coping style (Use, M = .88, SD = .68; Help, M = .57, SD = .50). The fatalistic coping style represents pessimism, hopelessness, and feeling of little control over the situation.

Although the statistics speak volumes, the real treasure of this study is the words, the written thoughts, and experiences of the women who lived the experience. Three open-ended questions on the demographic data sheet offered opportunity for each participant to share her special manner of dealing with the diagnosis of breast cancer. Major themes emerged from each open-ended question. The first question was what other health

Table 3

Top 10 Coping Strategies and Their Helpfulness

Coping strategy	Style	Use %	Helpfulness %
1. Prayed or put trust in God	Supportant	90	93
2. Tried to think positively	Optimistic	90	80
3. Tried to keep your life as normal as possible and not let problem interfere	Optimistic	81	60
4. Tried to handle things one step at a time	Confrontive	74	80
5. Thought about the good things in your life	Optimistic	71	73
6. Tried to keep busy	Palliative	77	73
7. Tried to keep a sense of humor	Optimistic	68	60
8. Talked the problem over with family or friends	Supportant	65	70
9. Tried to find out more about the problem	Confrontive	55	57
10. Hoped that things would get better	Optimistic	61	37

problems are you currently experiencing or have you experienced in the past? At least eight of the women had experienced no other health problems. Sinus trouble, early menopause and/or hysterectomy, hypertension, arthritis, and some form of chronic pain were problems experienced by at least four individuals.

The second question asked what support systems are available to you as you cope with this diagnosis? The most common answer to this question was "friends and family," with 25 women including this response. Other frequently used responses were "faith in Jesus, God," "church, church family and/or clergy," and "cancer support groups or Reach to Recovery," each with at least 10 responses. "Doctors and nurses," "husband" (separate from friends and family), and "prayer" were mentioned less frequently, but still fairly often.

The third open-ended question, the biggest influence to cope with this diagnosis, yielded the most varied responses, yet also produced several common themes. "Faith in God" was the most common response to the question with at least 22 women citing this influence. With 17 responses, "Love from family and friends" was also a popular influencing factor. Some other particularly personal and individually helpful coping influences were the following:

My belief that God is in control.

People who had the same thing called and offered support and encouragement.

I believe that God has healed me and that He has left me here for a purpose.

I know that the Good Lord is with me every day.

"My" acceptance of the encounter with cancer.

Knowing that God wouldn't put more on me than He knows I'm capable of handling. He gets me through my difficult times.

I have tried to live each day to the fullest--regardless of how I feel. I reached out to do the important things with people. Forgot how dusty my house is--the unimportant things were neglected.

Acceptance and hope and gratitude.

I am a better person because God chose me to have this experience!

GOD!

The overall attitude with which most of the questionnaires were completed was one of hopefulness. Even those women who stated they had recurrence, metastasis, or other serious medical problems generally were optimistic. Findings from this research demonstrated that while high levels of SWB and total coping as measured on the JCS are not positively correlated, this sample of women used the optimistic coping style most frequently and evaluated the supportant coping style as the most helpful.

Chapter V

The Outcomes

Breast cancer has been determined to be the most common form of cancer among American women with 180,000 new cases reported each year. Coping with the diagnosis can be an enormous task. The purpose of this descriptive study was to determine whether there was a correlation between spiritual well-being (SWB) and coping in women with breast cancer. The theoretical model which was used to guide this study was the Neuman Systems Model.

The sample consisted of 31 women, ranging in age from 30 to 75 years, predominantly from the Jackson, Mississippi area. Data were collected using three instruments which measured SWB, coping and coping styles, and demographic data. The Pearson *r* was utilized to correlate total SWB and total coping scores. In this chapter, a discussion of the outcomes from this research study are presented. Conclusions, implications, and recommendations for further research also are included.

Summary of Findings

The sample was comprised of 31 women who completed the questionnaire packet appropriately during the months of April and May 1996. The women were from the Jackson,

Mississippi area, were patients of two Jackson-based oncologists, or were friends or family of contacts in the Jackson area who were referred to the researcher when the need was made known.

The majority of the women in the study were white (87%) and married (74%). The length of time since diagnosis ranged from 2 months to 19 years with a median of 3 years. Various treatment modalities had been used with the women, the most common of which was mastectomy. The average age of the participants was 54.4 years. Every participant reported having some religious affiliation.

The total SWB scores and the total use and helpfulness coping scores of the sample were analyzed using Pearson's product-moment correlation. No statistically significant correlation was found between the total SWB scores and total use and helpfulness coping scores. Thus the hypothesis, which stated that there would be a significant positive correlation between SWB and coping in women with breast cancer, was rejected.

The total SWB and the SWB subscales, existential well-being (EWB) and religious well-being (RWB), were correlated with the eight coping style subscales described by Jalowiec (1987). Several areas were statistically significant, and others approached significance. The total SWB scores were shown to have a significant negative correlation with the fatalistic coping style ($p = .034$).

Another statistically significant finding was that both RWB and total SWB were positively correlated with the supportant coping style ($p = .018$ and $p = .027$, respectively).

Overall the participants in this study exhibited fairly high levels of SWB, especially RWB. The coping style most used by women in the sample was the optimistic coping style. The supportant coping style was the second most frequently used and the most helpful coping style. The two coping strategies which were most often used and most helpful to the participants in the study were "prayed or put trust in God" and "tried to think positively." The coping style selected the least often for use or helpfulness by women in the sample was the fatalistic coping style.

Major themes emerged from responses to the open-ended questions on the demographic questionnaire. When asked, "What support systems are available to you as you cope with this diagnosis?" the most popular responses were "friends and family," "faith in God or Jesus," "clergy, church or church family," and "cancer support groups." The question which asked what "the biggest influence on my ability to cope with this diagnosis" was met with many responses, but "faith in God," and "love from family and friends" emerged as the two major themes.

Discussion

Although the research hypothesis was not supported, several important findings emerged. Fredette (1995) reported that spirituality was considered a powerful force by participants in a study on coping in women with breast cancer. All Fredette's participants cited aspects of religion, spirituality, prayer, meditation, or God as coping methods. In the present study, 90% of the respondents reported that they "prayed or put your trust in God" and 93% reported that the coping strategy was "very helpful." In the open-ended questions on the researcher-designed demographic data sheet, "faith in God" and "love from family and friends" were the two most common responses to the question about "the biggest influence on my ability to cope with this diagnosis." These findings are important to the nurse practitioner because they point to the patient's perception that spiritual life and a loving and supportive network of family and friends are crucial to coping with a major illness such as breast cancer. The nurse practitioner may be in the position to emphasize and encourage these relationships and nurture those qualities and behaviors which lead to enhanced coping abilities.

The findings supported the research of King and Bushwick (1994) which revealed that 94% of their sample believed that spiritual health was as important as

physical health. In the present study, the range of SWB scores was 64 to 120 with a mean of 109.6, SD = 13.6. Seven (23%) of the respondents recorded a perfect score of 120. A possible justification for the high SWB scores may be that a critical incident, such as receiving a cancer diagnosis, often reminds a woman of her vulnerability and finiteness, serving to inspire her to become more attuned to her spiritual side and to set priorities in life with new meaning.

Kaczorowski (1989) found a negative correlation between high levels of SWB and anxiety in patients with cancer. In the present study, a significant inverse relationship was discovered between SWB and a fatalistic coping style in which pessimism, hopelessness, and a feeling of little control of the situation are utilized. Since the women in this study had relatively high levels of SWB, and considering the Kaczorowski finding, the inverse correlation is not surprising. While no causation is implied, the finding is noteworthy for the nursing profession. Women who utilize a fatalistic coping style may be at risk for low SWB while dealing with a breast cancer diagnosis. According to Neuman (1989), "the relationship between the spiritual variable and wellness may be better understood and utilized as an energy source in achieving client change and optimal system stability" (p. 30). Therefore, it is important for nurses at all

levels of practice to be prepared to assess SWB and provide appropriate interventions. Because of the holistic nature of nurse practitioners' scope, nurse practitioners could intervene directly by assessing the patient's SWB as well as emotional and physical conditions and make appropriate interventions and referrals.

Carson et al. (1990), in a study involving AIDS patients, found that hope and SWB were significantly positively correlated, which indicated that those participants who had high scores in SWB also had higher hope scores. The literature points to the probability that high levels of SWB indicate high levels of positive outcomes and lower levels of negative influences. While in the current study there was no statistically significant correlation between total SWB and coping in women with breast cancer, there were several correlations which were statistically significant. RWB and total SWB were positively correlated with the use of the supportant coping style. Total SWB and EWB were positively correlated with the helpfulness of the optimistic coping style. Total SWB and RWB were positively correlated with the helpfulness of the supportant coping style.

Landis (1996) described the nurse's presence and listening skills as important nursing interventions. Landis recommended fostering family relationships and promoting family involvement as supportive care which

could be offered by nurses. A similar recommendation could be drawn from the present study as many of the participants cited "love and support from friends and family" as major factors in helping them cope with their disease.

Mickley et al. (1992) derived important conclusions in their research on women with breast cancer. A significant relationship was found between hope and SWB. The researchers also found that the patient's medical prognosis was not related significantly to the degree of SWB or psychological health. Similarly, in the present study women with the life-threatening disease of breast cancer were not found to display a positive correlation between SWB and coping scores.

The compilation of findings from the previously existing literature and the current study indicate similarities at many levels which involve nursing practice, education, research, and theory. The evidence of such similarities lends credence to the present study and strengthens and supports previous research.

Limitations

Certain limitations were noted with the research study. A relatively small sample size made statistical significance less likely. Speculatively, a larger sample would have yielded a significant positive correlation. Contributing to the small sample size could have been the

rather cumbersome, lengthy questionnaire packet, specifically the Jalowiec Coping Scale. Twenty to 30 minutes were required to complete the instruments, which may not have been feasible or desirable to potential respondents. Although the JCS yielded useful information, a briefer, more concise instrument may have been more beneficial.

Eleven (35%) of the respondents reported having been diagnosed for one year. Rounding to the nearest year belied the true recency of diagnosis. These 11 women had actually received their cancer diagnosis from 2 months to one year. Thus, they were not far removed from the initial crisis of diagnosis. Another possible misleading statistic was the 45% (14 women) who were currently undergoing treatment for cancer. While for some treatment may have consisted of a mild oral chemotherapy, for those with new disease and those with recurrence or metastasis, the treatment regime might be rigorous. Some of the questionnaire packets were distributed in oncologists' offices while the respondents were actually receiving their IV chemotherapy dose. Many of these women were faced with tremendous physical and emotional upheaval, yet as a whole they had high levels of SWB and were coping with their disease in healthy, adaptive ways by using mainly the optimistic and supportant coping styles.

Conclusions

1. There was no statistically significant correlation between SWB and coping in women with breast cancer.

2. The women who participated in the study had overall high levels of total SWB (M = 109.6, SD = 13.6) and reported high usage and helpfulness of the optimistic and supportant styles of coping.

3. A statistically significant negative correlation emerged between EWB and total SWB and the fatalistic coping style use and between EWB and the fatalistic coping style helpfulness.

4. A statistically significant correlation existed between RWB and total SWB and the use and helpfulness of the supportant coping style.

5. A statistically significant correlation existed between EWB and total SWB and the helpfulness of the optimistic coping style.

6. Two major themes emerged from content analysis of the open-ended questions which inquired what was the biggest influence on effective coping with the cancer diagnosis. The themes were "faith in God" and "love from family and friends."

Implications

Theory. Several implications for nursing can be discovered in the findings of the study. The findings strongly support the Neuman Systems Model (Neuman, 1989)

which gives equal import to the spiritual part of man as well as the physiological, psychological, sociocultural, and developmental aspects. The total scores and individual responses to the questions indicate that the spiritual element of a person is integral and influential, regardless of whether there is a personal awareness.

Practice. Prayer or talking to God emerged as an important coping method when dealing with the diagnosis of breast cancer; that is, the coping strategy was often used and was very effective. Another important coping method revealed was thinking positively. The role of the nurse may be to provide encouragement, promote a time and place for prayer and meditation, and promote visits from supportive family, friends, and clergy members. Also, the nurse may relate success stories and provide referrals to support groups. Nurses have opportunities to provide an attitude of acceptance and valuing to individuals to support and encourage their healthy coping behaviors with the diagnosis of breast cancer.

Education. The results of the research have educational implications for nursing. Clearly, nurses need to be taught that people are comprised of more than flesh and blood and that there are certain spiritual needs which are possessed by all, whether or not the individual is cognizant of those needs. Nurses can learn to perform spiritual assessments on their patients and provide

appropriate interventions and referrals. Nurses should learn to respect patients' needs and desires for quiet time to reflect and pray and to understand that for many patients the spiritual element of healing is as important as physical healing.

Research. The present study lends support to the evolving body of knowledge wherein the spiritual element of man is becoming more evident to the scientific community. With the majority of respondents citing that an often used coping strategy was prayer, and at least 70% of respondents stating that their faith in God was the biggest influence on the ability to cope with the diagnosis, it must be concluded that the spiritual aspect of human beings is truly elemental.

Recommendations for Further Study

Based on the findings of this study, the following recommendations are made:

1. Replication of the study using a larger sample size.

2. Replication of the study using a random sample, thereby reducing the chances of a homogeneous group.

3. Replication of the study using a different instrument to measure coping which would yield total scores, yet be less lengthy and burdensome in administration and interpretation.

4. Replication of the study location other than the Southeastern United States.

5. Replication of the study comparing spiritual well-being and coping in healthy women who had not recently undergone a life-altering experience.

6. Perform a qualitative research study where spiritual well-being in women with breast cancer can be explored fully.

REFERENCES

References

American Cancer Society. (1994). Facts on breast cancer. Atlanta, GA: Author.

American Cancer Society. (1995a). Cancer facts and figures--1995. Atlanta, GA: Author.

American Cancer Society. (1995b). 1995 Mississippi cancer facts and figures. Jackson, MS: Author.

Berggren-Thomas, P., & Griggs, M. J. (1995). Spirituality in aging: Spiritual need or spiritual journey? Journal of Gerontological Nursing, 21(3), 5-10.

Bufford, R. K., Paloutzian, R. F., & Ellison, C. W. (1991). Norms for the spiritual well-being scale. Journal of Psychology and Theology, 19(1), 56-67.

Carson, V., Soeken, K. L., Shanty, J., & Terry, L. (1990). Hope and spiritual well-being: Essentials for living with AIDS. Perspectives in Psychiatric Care, 26(2), 28-34.

Costello, R. B. (Ed.). (1995). Random House Webster's college dictionary. New York: Random House.

DeVinne, P. B. (Ed.). (1990). Webster's illustrated encyclopedic dictionary. Montreal: Tormont.

Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, 2(4), 330-340.

Fredette, S. L. (1995). Breast cancer survivors: Concerns and coping. Cancer Nursing, 18(1), 35-46.

Halstead, M. T., & Fernsler, J. L. (1994). Coping strategies of long-term cancer survivors. Cancer Nursing, 17(2), 94-100.

Jalowiec, A. (1987). Overview of Jalowiec Coping Scale. Chicago: Loyola University of Chicago.

Kaczorowski, J. M. (1989). Spiritual well-being and anxiety in adults diagnosed with cancer. Hospice Journal, 5(3-4), 105-116.

King, D. E., & Bushwick, B. (1994). Beliefs and attitudes of hospital inpatients about faith healing and prayer. Journal of Family Practice, 39(4), 349-352.

Landis, B. J. (1996). Uncertainty, spiritual well-being, and psychosocial adjustment to chronic illness. Issues in Mental Health Nursing, 17(3), 217-231.

Lazarus, R. S., & Folkman, S. (1977). The concept of caring. In A. Monat & R. S. Lazarus (Eds.), Stress and coping: An anthology (pp. 189-212). New York: Columbia University.

Mickley, J. R., Soeken, K., & Belcher, A. (1992). Spiritual well-being, religiousness and hope among women with breast cancer. Image: Journal of Nursing Scholarship, 24(4), 267-272.

Moberg, D. O. (1984). Subjective measures of spiritual well-being. Review of Religious Research, 25(4).

Neuman, B. (1989). The Neuman Systems Model (2nd ed.). Norwalk, CT: Appleton & Lange.

The Open Bible (New American Standard Version). (1985). New York: Thomas Nelson.

Polit, D. F., & Hungler, B. P. (1995). Nursing research: Principles and methods (5th ed., p. 640). Philadelphia: Lippincott.

Williams, T. R., O'Sullivan, M., Snodgrass, S. E., & Love, N. (1995). Psychosocial issues in breast cancer. Postgraduate Medicine, 98(4), 97-110.

APPENDIX A

DEMOGRAPHIC DATA QUESTIONNAIRE

Demographic Data Questionnaire

Thank you for agreeing to participate in my study. In addition to completing the following two questionnaires, I would ask that you give me some additional information about yourself which will assist me in the interpretation of the data.

1. Age:_____

2. Race
   _____ 1. White
   _____ 2. Black
   _____ 3. Hispanic
   _____ 4. Oriental
   _____ 5. American Indian
   _____ 6. Other

3. Marital status
   _____ 1. Single
   _____ 2. Married
   _____ 3. Separated/divorced
   _____ 4. Widowed

4. How long ago were you diagnosed with breast cancer?_____

5. Did you have (circle your answer)

a.	lumpectomy	Yes	No
b.	mastectomy	Yes	No
c.	chemotherapy	Yes	No
d.	radiation	Yes	No
e.	repeat treatment	Yes	No
f.	reconstructive surgery	Yes	No

6. Are your currently undergoing treatment for cancer?
   _____ Yes _____ No
   If yes, please specify:_____

7. What do your doctors say about your present condition?
   _____

8. What other health problems are your currently experiencing or have you experienced in the past?
   _____
   _____

9. What support systems are available to you as you cope with this diagnosis?_____
   _____

10. Do you have any religious affiliation?
    _____ Yes
    _____ No
    If "Yes," please specify:_____

11. The biggest influence on my ability to cope with this diagnosis is_____
    _____

APPENDIX B

JALOWIEC COPING SCALE

 Study # _____

JALOWIEC COPING SCALE

This questionnaire is about how you cope with stress and tension, and what you do to handle stressful situations. In particular, I am interested in how you have coped with the stress of:

_____

This questionnaire lists many different ways of coping with stress. Some people use a lot of different coping methods; some people use only a few.

You will be asked two questions about each different way of coping with stress:

Part A

How often have you used that coping method to handle the stress listed above?

For each coping method listed, circle one number in Part A to show how often you have used that method to cope with the stress listed above. The meaning of the numbers in Part A is as follows:

0 = never used
1 = seldom used
2 = sometimes used
3 = often used

Part B

If you have used that coping method, how helpful was it in dealing with that stress?

For each coping method that you have used, circle a number in Part B to show how helpful that method was in coping with the stress listed above. The meaning of the numbers in Part B is as follows:

0 = not helpful
1 = slightly helpful
2 = fairly helpful
3 = very helpful

If you did not use a particular coping method, then do not circle any number in Part B for that coping method.

COPING METHODS	Part A How often have you used each coping method?				Part B If you have used that coping method, how helpful was it?			
	Never Used	Seldom Used	Sometimes Used	Often Used	Not Helpful	Slightly Helpful	Fairly Helpful	Very Helpful
1. Worried about the problem	0	1	2	3	0	1	2	3
2. Hoped that things would get better	0	1	2	3	0	1	2	3
3. Ate or smoked more than usual	0	1	2	3	0	1	2	3
4. Thought out different ways to handle the situation	0	1	2	3	0	1	2	3
5. Told yourself that things could be much worse	0	1	2	3	0	1	2	3
6. Exercised or did some physical activity	0	1	2	3	0	1	2	3
7. Tried to get away from the problem for a while	0	1	2	3	0	1	2	3
8. Got mad and let off steam	0	1	2	3	0	1	2	3
9. Expected the worst that could happen	0	1	2	3	0	1	2	3
10. Tried to put the problem out of your mind and think of something else	0	1	2	3	0	1	2	3
11. Talked the problem over with family or friends	0	1	2	3	0	1	2	3
12. Accepted the situation because very little could be done	0	1	2	3	0	1	2	3
13. Tried to look at the problem objectively and see all sides	0	1	2	3	0	1	2	3
14. Daydreamed about a better life	0	1	2	3	0	1	2	3
15. Talked the problem over with a professional person (such as a doctor, nurse, minister, teacher, counselor)	0	1	2	3	0	1	2	3
16. Tried to keep the situation under control	0	1	2	3	0	1	2	3
17. Prayed or put your trust in God	0	1	2	3	0	1	2	3
18. Tried to get out of the situation	0	1	2	3	0	1	2	3
19. Kept your feelings to yourself	0	1	2	3	0	1	2	3
20. Told yourself that the problem was someone else's fault	0	1	2	3	0	1	2	3
21. Waited to see what would happen	0	1	2	3	0	1	2	3
22. Wanted to be alone to think things out	0	1	2	3	0	1	2	3
23. Resigned yourself to the situation because things looked hopeless	0	1	2	3	0	1	2	3

COPING METHODS	Part A How often have you used each coping method?				Part B If you have used that coping method, how helpful was it?			
	Never Used	Seldom Used	Sometimes Used	Often Used	Not Helpful	Slightly Helpful	Fairly Helpful	Very Helpful
24. Took out your tensions on someone else	0	1	2	3	0	1	2	3
25. Tried to change the situation	0	1	2	3	0	1	2	3
26. Used relaxation techniques	0	1	2	3	0	1	2	3
27. Tried to find out more about the problem	0	1	2	3	0	1	2	3
28. Slept more than usual	0	1	2	3	0	1	2	3
29. Tried to handle things one step at a time	0	1	2	3	0	1	2	3
30. Tried to keep your life as normal as possible and not let the problem interfere	0	1	2	3	0	1	2	3
31. Thought about how you had handled other problems in the past	0	1	2	3	0	1	2	3
32. Told yourself not to worry because everything would work out fine	0	1	2	3	0	1	2	3
33. Tried to work out a compromise	0	1	2	3	0	1	2	3
34. Took a drink to make yourself feel better	0	1	2	3	0	1	2	3
35. Let time take care of the problem	0	1	2	3	0	1	2	3
36. Tried to distract yourself by doing something that you enjoy	0	1	2	3	0	1	2	3
37. Told yourself that you could handle anything no matter how hard	0	1	2	3	0	1	2	3
38. Set up a plan of action	0	1	2	3	0	1	2	3
39. Tried to keep a sense of humor	0	1	2	3	0	1	2	3
40. Put off facing up to the problem	0	1	2	3	0	1	2	3
41. Tried to keep your feelings under control	0	1	2	3	0	1	2	3
42. Talked the problem over with someone who had been in a similar situation	0	1	2	3	0	1	2	3
43. Practiced in your mind what had to be done	0	1	2	3	0	1	2	3
44. Tried to keep busy	0	1	2	3	0	1	2	3
45. Learned something new in order to deal with the problem	0	1	2	3	0	1	2	3
46. Did something impulsive or risky that you would not usually do	0	1	2	3	0	1	2	3

COPING METHODS	Part A How often have you used each coping method?				Part B If you have used that coping method, how helpful was it?			
	Never Used	Seldom Used	Sometimes Used	Often Used	Not Helpful	Slightly Helpful	Fairly Helpful	Very Helpful
47. Thought about the good things in your life	0	1	2	3	0	1	2	3
48. Tried to ignore or avoid the problem	0	1	2	3	0	1	2	3
49. Compared yourself with other people who were in the same situation	0	1	2	3	0	1	2	3
50. Tried to think positively	0	1	2	3	0	1	2	3
51. Blamed yourself for getting into such a situation	0	1	2	3	0	1	2	3
52. Preferred to work things out yourself	0	1	2	3	0	1	2	3
53. Took medications to reduce tension	0	1	2	3	0	1	2	3
54. Tried to see the good side of the situation	0	1	2	3	0	1	2	3
55. Told yourself that this problem was really not that important	0	1	2	3	0	1	2	3
56. Avoided being with people	0	1	2	3	0	1	2	3
57. Tried to improve yourself in some way so you could handle the situation better	0	1	2	3	0	1	2	3
58. Wished that the problem would go away	0	1	2	3	0	1	2	3
59. Depended on others to help you out	0	1	2	3	0	1	2	3
60. Told yourself that you were just having some bad luck	0	1	2	3	0	1	2	3

If there are any other things you did to handle the stress mentioned at the beginning, that are not on this list, please write those coping methods in the spaces below. Then circle how often you have used each coping method, and how helpful each coping method has been.

61.	1	2	3	0	1	2	3
62.	1	2	3	0	1	2	3
63.	1	2	3	0	1	2	3

Revised 7/90

APPENDIX C

EIGHT COPING STYLES ON THE 1987 REVISED JALOWIEC COPING SCALE

Eight Coping Styles on the 1987 Revised Jalowiec Coping Scale

1. Confrontive Coping Style: 10 items
confront the situation, face up to the problem, constructive problem-solving

4. Thought out different ways to handle the situation
13. Tried to look at the problem objectively and see all sides
16. Tried to keep the situation under control
25. Tried to change the situation
27. Tried to find out more about the problem
29. Tried to handle things one step at a time
33. Tried to work out a compromise
38. Set up a plan of action
43. Practiced in your mind what had to be done
45. Learned something new in order to deal with the problem

2. Evasive Coping Style: 13 items
evasive and avoidant activities used in coping with a situation

7. Tried to get away from the problem for a while
10. Tried to put the problem out of your mind and think of something else
14. Daydreamed about a better life
18. Tried to get out of the situation
20. Told yourself that the problem was someone else's fault
21. Waited to see what would happen
28. Slept more than usual
35. Let time take care of the problem
40. Put off facing up to the problem
48. Tried to ignore or avoid the problem
55. Told yourself that this problem was really not that important
56. Avoided being with people
58. Wished that the problem would go away

3. Optimistic Coping Style: 9 items
positive thinking, positive outlook, positive comparisons

2. Hoped that things would get better
5. Told yourself that things could be much worse
30. Tried to keep your life as normal as possible and not let problem interfere
32. Told yourself not to worry because everything would probably work out fine
39. Tried to keep a sense of humor
47. Thought about the good things in your life
49. Compared yourself with other people who were in the same situation
50. Tried to think positively
54. Tried to see the good side of the situation

4. Fatalistic Coping Style: 4 items
pessimism, hopelessness, feeling of little control over the situation

9. Expected the worst that could happen
12. Accepted the situation because very little could be done
23. Resigned yourself to the situation because things looked hopeless
60. Told yourself that you were just having some bad luck

5. Emotive Coping Style: 5 items
expressing and releasing emotions, ventilating feelings

1. Worried about the problem
8. Got mad and let off steam
24. Took out your tensions on someone else
46. Did something impulsive or risky that you would not usually do
51. Blamed yourself for getting into such a situation

6. Palliative Coping Style: 7 items
trying to reduce or control distress by making the person feel better

3. Ate or smoked more than usual
6. Exercised or did some physical activity
26. Used relaxation techniques
34. Took a drink to make yourself feel better
36. Tried to distract yourself by doing something that you enjoy
44. Tried to keep busy
53. Took medications to reduce tension

7. Supportant Coping Style: 5 items
using support systems: personal, professional, spiritual

11. Talked the problem over with family or friends
15. Talked the problem over with a professional person (such as a doctor, nurse, minister, teacher, counselor)
17. Prayed or put your trust in God
42. Talked the problem over with people who had been in a similar situation
59. Depended on others to help you out

8. Self-Reliant Coping Style: 7 items
depending on yourself rather than on others in dealing with the situation

19. Kept our feelings to yourself
22. Wanted to be alone to think things out
31. Thought about how you had handled other problems in the past
37. Told yourself that you could handle anything no matter how hard
41. Tried to keep your feelings under control
52. Preferred to work things out yourself
57. Tried to improve yourself in some way so you could handle the situation better

APPENDIX D

PERMISSION FOR USE OF JALOWIEC COPING SCALE

PERMISSION FOR USE OF JCS

PERMISSION IS HEREBY GRANTED TO

Denise Ferriss

TO USE THE JALOWIEC COPING SCALE

IN A STUDY OR PROJECT

Anne Jalowiec

ANNE JALOWIEC, RN, PHD

LOYOLA UNIVERSITY OF CHICAGO

DATE: April, 1996

APPENDIX E

PERMISSION TO USE THE SPIRITUAL WELL-BEING SCALE

LIFE ADVANCE, INC.
81 Front Street
Nyack, N.Y. 10960

October 30, 1995

Ms. Denise Ferriss
98 Pinehaven Place
Clinton, MS 39056

Dear Ms. Ferriss:

Thank you for your interest in using the Spiritual Well-Being Scale (SWBS) for your research. The SWBS has been under development for fifteen years. It is one of the most widely researched measures of life quality and spirituality available.
The SWBS has excellent reliability and validity. It is only twenty items long and takes only 10-15 minutes to complete. The SWBS is appropriate for anyone who has a meaningful concept of God. Furthermore, it helpfully distinguishes between religious and existential (life purpose/satisfaction) well-being.

The SWBS has been widely researched in a variety of contexts and with a variety of sample groups. It has been found to be significantly related with such variables as blood pressure, perceived health, adjustment to hemodialysis, pain, impairment and emotional coping in cancer patients, hope and hardiness for various patient populations, such as male AIDS patients. It has also been shown to have significant relationships with a variety of psychological and relational variables such as self-esteem, loneliness, depression, treatment outcomes, stress, aggressiveness, assertiveness and parenting styles.

We are happy to make the Scale available to you at a special student discount rate of $.50 (US) per copy in order to facilitate the accomplishment of your degree/course requirements. The Scale is offered to you at this rate under the condition that you provide for us a 1-2 page summary of your thesis or dissertation project along with your order form, and with the understanding that you will subsequently provide a brief summary of your results so that we can properly refer to your study in subsequent review articles.

We will also include the primary review articles along with the Information Profile sheet which gives scoring directions when we receive your order and full payment.

Sincerely,

Craig Ellison

Craig W. Ellison, Ph.D.

APPENDIX F

APPROVAL OF MISSISSIPPI UNIVERSITY FOR WOMEN COMMITTEE ON USE OF HUMAN SUBJECTS IN EXPERIMENTATION

MISSISSIPPI UNIVERSITY FOR WOMEN
Columbus, MS 39701

Office of the Vice President for Academic Affairs
Eudora Welty Hall
P.O. Box W-1603
(601) 329-7142

March 5, 1996

Ms. Denise V. Ferriss
c/o Graduate Program in Nursing
Campus

Dear Ms. Ferriss:

I am pleased to inform you that the members of the Committee on Human Subjects in Experimentation have approved your proposed research provided the following standard is met:

> The consent form should add that the standard of care will not be affected by non-participation in the study.

I wish you much success in your research.

Sincerely,

Susan Kupisch
Vice President
for Academic Affairs

SK:wr

cc: Mr. Jim Davidson
Dr. Mary Pat Curtis

APPENDIX G

CONSENT FORM

Dear Survey Participant:

My name is Denise Ferriss. I am a registered nurse completing a master's degree in nursing at Mississippi University for Women. I am conducting a research study concerning the spirituality and coping characteristics of women with breast cancer. The findings of the study may benefit women who receive a diagnosis of breast cancer in the future. I am requesting that you participate in my study. Approximately 30 minutes of your time will be needed to complete the forms. If your name was obtained from a support group or physician's office, please be assured that your decision to participate or not participate will in no way affect the care you receive.

Completion of the questionnaires and your signature on this form indicate your agreement to participate in this study. Participation is voluntary and your confidentiality will be maintained as I will separate the consent forms and the questionnaires as soon as I receive them. You may withdraw from the study at any time prior to returning the questionnaires.

Thank you in advance for your willingness to share from your experience.

Sincerely,

Denise Ferriss, RN

I, _____, agree to participate in this study. I understand the terms of my consent.

_____
Signature of Participant