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The Relationship Between Social Support, Coping Style, and Emotional Status Among Individuals With Cancer, Undergoing Chemotherapy

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THE RELATIONSHIP BETWEEN SOCIAL SUPPORT, COPING STYLE, AND EMOTIONAL STATUS AMONG INDIVIDUALS WITH CANCER, UNDERGOING CHEMOTHERAPY

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ABSTRACT

A cross sectional descriptive study was conducted to examine the relationship between social support, coping style, and emotional status among individuals with cancer undergoing chemotherapy. A questionnaire schedule consisting of social support, coping style, and emotional status was administered to subjects during their office visits to an oncologist. No significant relationships were found between social support, coping style, and emotional status. A significant correlation was found between those patients who had more affection, affirmation, and aid from their support system and the amount of guilt experienced by those patients ($p = .05$).

Patients who did not finish high school used "settle for the next best thing" and "do anything just to do something" more often than those who did finish high school ($p = .02$). The males used the coping item "talk the problem over with someone who has been in the same type situation" more often than females did ($p = .02$). Controlling the situation was the most common coping strategy used.

CHAPTER I

INTRODUCTION

Statistics show that cancer ranks as the second leading cause of death in the Unitied States (American Cancer Society, 1981). Since the population of cancer clients makes up a large proportion of those people cared for by nurses, it has become essential for nurses to understand the impact of cancer on the individual. Advanced cancer treatment modalities have promoised the individual with the disease a longer life span. As a consequence, nurses need to understand how the individual copes with the disease and what factors influence his/her adjustment, while keeping in mind that the individual is not only a biological organism, but is also a member of a social group with which he/she interacts (Lipowski, 1969). Social support provides the individual with cancer an interaction that facilitates emotional unburdening and provides him/her with resources for articulation of satisfactory identity (Hirsh, 1981); it provides the individual with cognitive guidance and explanation of the troubling situation which leads to problem-solving.

In this study, the researcher examined the relationships between cancer clients' social support, their coping style choices, and emotional status.

CONCEPTUAL FRAMEWORK

Cancer as a Stress

The conceptual framework for this study evolves from the prevalent theories of stress and the assumption that serious illnesses can be a source of stress. Stress is a concomitant of serious illness such as cancer, especially when cancer patients experience unanticipated events that go beyond their control. In addition to the stress produced by the uncertainty of the illness, there is the stress of the treatment itself. The uncertainty of the illness and treatment is responsible for the greatest threat of the entire disease process. The physical and functional impairment plays an important role in how well cancer clients respond to the stressful situation (Krouse and Krouse, 1982).

Selye views stress as a physiological process. He defines stress as a "...nonspecific response of the body to any demand made upon it" (1976, p. 13). Lazarus and Launier (1976) view stress from a psychological point of view. They define stress as "...any event in which environment or internal demand (or both) tax or exceed the adaptation resources of an individual, social system, or tissue system" (p. 297). Cox (1978) proposes stress to be a dynamic system of transaction between the individual and his environment. Caplan (1981) defines stress as a condition of discrepancy between the demands made on an individual and the individual's capablity to respond. The consequences of stress will determine the individual's well-being.

Stress could be defined as any change that needs a response. An individual's reaction to stress is unique. Stress can be positive or negative. For example, a "positive stress" can be experienced as the motivation to accomplish certain tasks. A "negative stress" can be things such as cancer and other diseases. The individual's reaction to the negative stress depends on his or her appraisal or transactions with the disease course. In this proposal, the focus is on the negative stress that threatens the individual's well-being, with emphasis on the psychological aspect of stress in the cancer client.

Cancer clients face many types of fear. A primary fear is death. Most cancer clients have preconceived ideas about cancer, one of which is equating cancer with death. Cancer is a frightening illness because causes are uncertain and cures are few. The very word, "cancer", to most people, implies an insidious onset, progressive wasting, and a very painful death (Oden, 1976). The myth of cancer amplifies the fear a client experiences so the client and the family feel the loss before it has even occurred (Severo, 1977). Many cancer clients fantasize death and dying before its actual occurrence. Clients hope more for the control of the disease than for the cure.

The prolonged course of the disease is the second major fear of cancer clients (Bahnson, 1975). Treatment involves discomfort, and possibly a degree of disfigurement over a prolonged period of time (Ahmed, 1981; Lynch and Krush, 1968). Uncertainty about

duration of the disease, and about the extent of treatment creates a sense of unending illness (Bloom, 1981). The fear which results from diagnosis and treatment can be potentially as stressful to the client as cancer itself.

Unlike other diseases, in most cases, nothing the client does or refrains from doing can alter its course. For example, diabetes mellitus can be controlled through diet and insulin (Abrams, 1966). Cancer, however, evokes a threatened sense of self (Wortman and Dunkel-Schetter, 1979) because the client has no control over his/her situation. The threat, (anticipation of danger) whether realistic or not, is usually accompanied by anxiety. A study conducted by Maguire, Tail, and Brook (1980) of subjects who had mastectomies alone, versus subjects who had mastectomies plus chemotherapy revealed significant emotional stress linked to more extended treatment.

The third major fear is fear of mutilation or change in body image (Lynch and Krush, 1968). The greater the value of the body part or the system in which function is affected, the more severe the psychological reaction is likely to be (Lipowski, 1969). For example, hair loss and mastectomy for a young woman could be hard to bear. Therefore, it could be expected that such a client, whose femininity depends to a large extent on the body part which was lost, will suffer a great sense of loss and alteration in body image.

It is evident that factors beyond the mere presence of the disease play a major role in determining the ability of an individual to adapt to the illness, and all the threats that cancer imposes. The very nature of cancer contributes to the sense of loss of control.

Coping

Cancer as a diagnosis imposes particular stress. Individuals have their own tendencies to cope in their own special patterns. Lazarus (1966) defines coping as a strategy for dealing with a threat. To Lipowski (1970), coping is a "cognitive and motor activity which a sick person employs to preserve his bodily integrity, to recover reversibly impaired function, and compensate to the limit for any irreversible impairment" (p. 93). Coping is viewed by Cobb (1976) as a "...manipulation of the environment in the service of self" and adaptation means "change in the self in an attempt to improve person-environment fit" (p. 310). Lazarus and Launier (1978) highlight the importance of coping as an interaction of individuals and the environment. Pearlin and Schooler (1978) see coping as multidimensional behavior. It functions at a number of levels: behaviors, cognitions, and perceptions. Weisman (1979) defines coping as "using information to regulate and modify behavior in response to a new problem" (p. 41).

Coping can be defined as what people do when they face a stressful situation. Coping is a process that provides cancer

clients with strategies in approaching the stressful situation and dealing with the many fears. The fact is that the fears associated with the disease place the psychological and physiological systems in jeopardy. The alternatives for coping with the threat result from intrapersonal factors and from expectations concerning the disease, which differ from one person to another.

According to Lazarus (1967) there are two methods in which individuals attempt to manage stress. The first is the cognitive coping style. Lazarus (1967) implies that thoughts are involved in the perception and appraisal of the events. The individual employs characteristic modes of thinking and problem solving in response to illness. An example of the cognitive coping style process is an effort to seek new information regarding the illness. These types of perceptual and cognitive processes influence decision-making and result in certain ways of performance, or determine certain coping activities (Lazarus, 1967).

Lipowski (1970) describes how cognitive coping styles may be used to minimize the available information or focus with vigilance upon perceived dangers. These responses reflect attempts to reduce uncertainty with diseases such as cancer. Minimization is characterized by an attempt to minimize, reduce, or ignore significant stressful events. Minimization ranges from total denial to reasonable doubt. On one hand, it appears sometimes that some individuals employ minimization of threat as an initial response to illness; but on the other hand, some individuals apply

minimization of threat as an habitual mode of coping rather than just a transient response. Vigilance is a style in which brisk responses to perceived signals of danger and attempts to reduce uncertainty about stressful events associated with the disease are evident. Vigilance ranges from hypervigilance or exaggeration of threats to body integrity, to realistic recognition of threats, and rational planning.

The second major coping style is the behavioral coping style. This style reflects the action tendency, rather than the intellectual tendency in an attempt to deal with the problem and its stressful effects. There are three behavioral coping styles. Tackling is a behavioral style which implies a disposition to adopt an active attitude towards challenging the stress associated with the illness situation. At one extreme of this behavior the individual may fight illness at any cost. At the other end the individual behaviors are rational and related to the current demands of illness whether they are recovery, or compensation for disability. Capitulating is a style which is characterized by passivity. The individual shows little initiation of action to combat illness and achieve maximum possible recovery. "A degree of passive giving-in is usually the most adaptive form of behavior during the acute stage of every serious illness" (Lipowski, 1970, p. 97). However, the individual who continues to use capitulating at a later stage is no longer adaptive. Avoidance is a style in which active attempts to get away from the exigencies of illness are evident. This behavior is

most observed among individuals for whom acceptance of the sick role (dependent role) revives a serious threat to independence. This behavior is concomitant with denial of illness.

Another formulation of coping is concerned with the function of coping. Lazarus (1980) pointed out that in coping with a stress, the individual focuses on either problem orientation coping or on affect orientation coping. In problem orientation coping style, the individual directs his action in handling a problem, and/or stressful situation. He attempts to modify or eliminate sources of stress by his own behavior. Weisman (1979) states that people who use the problem solving style are the least vulnerable to stress. Caplan (1981) states the problem solving depends on previously successful coping situations, in addition to the individual's expectation that he is likely to succeed. Billing and Moos (1981) pose the position that people in general tend to employ problem-focused, rather than emotionally-focused coping styles.

In use of affective orientation coping styles, individuals do not resolve a particular situation, but manage their reaction around it. They try to handle the distressing emotion evoked by the stressful situation. The primary function is to manage the emotional consequences of stress and to help maintain one's emotional equilibrium. Folkman and Lazarus (1980) found that health-related stress elicited fewer problem-focused coping styles, and more emotionally-focused coping styles than work or family stress.

The experience of stress brings into play coping style responses. These responses play a central role in effectiveness of an individual's response to stress. Coping is essential not only in altering the situation, but also in accommodating the stress and in reducing the impact of stress (Cox, 1978) without being overwhelmed (Bloom, 1981).

Three general determinants of coping style are: illness related factors, intrapersonal factors, and social support. The nature of diseases such as cancer implies continuous change of the illness on the client. Coping is a function in which individuals attempt to maintain a personal control over their stressful stiuation. The degree of stress will set off individual appraisal to the situation (Lazarus, 1966). The more the disease entails, the more the disease challenges coping styles (Lipowski, 1970). A growing literature suggests that cancer clients' reaction to illness can influence well-being, prognosis and outcome (Cobb, 1976; Derogatis, Abeloff and Melisaratos, 1979; Weisman and Worden, 1975).

Research reveals the various intrapersonal factors which are determinants of coping style. In a study by Tucker (1982) it was found that male subjects used less alcohol as an aid to coping than female subjects did. Income and education are likely to influence coping style. A study by Billing and Moos (1981) suggested that subjects with higher education and income were more likely to use problem-solving style and less likely to use avoidance. This finding was supported by Pearlin and Schooler

(1978). Timing of illness in the individual's developmental stage is also an influence on optimal coping (Norbeck, 1981). For example, most children were found to cope well in reaction to their physical illness (Langford, 1961).

Social Support

The coping style determinant of interest to this study is social support. Research characterizes social support by a general assumption that it is beneficial (Wortman, 1984). Social support has been identified as an essential variable in determining how well the individual copes with cancer (Maxwell, 1982). Social resources may serve either to enhance or diminish coping effectiveness (Billing & Moos, 1981). The concept of social support is a broad concept, yet an unspecified domain. Social support has been measured differently; in recent years researchers attempted to specify the concept by identifying its components. Kahn and Antonucci (1980) define social support as a set of people in interpersonal transactions that include the expression of positive, effective affirmation of one person towards another. Cobb (1976) and Cassel (1976) conceived social support as information leading the subject to believe that (1) he is cared for and loved, (2) he is esteemed and valued, and (3) he belongs to a network of communication and mutual obligation. Weiss (1974) and Caplan (1981) refer to social support as people who can be relied upon to give guidance to an individual.

Nurturance and reassurance are described as another type of support (Weiss, 1974). Dean and Lin (1977) and Caplan (1981) distinguish between expressive social supports (such as mobilizing psychological resources and mastering emotional burdens) and instrumental social supports (such as material aid). Linsey, Norbeck, Carrieri and Perry (1981) emphasized that support can be provided from different resources (e.g., family, friends, and health care providers). These composite interpersonal relationships satisfy specific personal needs. It appears from these definitions that social support is a multifaceted concept that serves multiple functions. In the proposed study, social support is defined as a set of interpersonal relationships that provide action or behavior in order to assist the individual in dealing with demands.

The impact of social support on the outcome of illness has been supported in the literature. Abrams (1966) states that patients' relationships with others may alter the progress of the illness. Weisman and Worden (1975) pointed out in their study that subjects lived longer if they had significant mutually responsive relationships. In contrast, subjects who had destructive relationships survived only short periods. Support to the individual with cancer from the health care provider has been reported (Hinton, 1973; Jamison, Wellisch & Pashau, 1978; Wood and Erap, 1978). Some research suggests that poor relationships between clients and their physicians contribute to a delay in reporting illness (Henderson, 1966). Some clients may receive inconsistent behaviors

and mixed messages from their families and friends which evoke conflict in feelings in addition to the fear (Wortman and Dunkel-Schetter, 1979).

The individual with a diagnosis of cancer, experiencing all the associated fears and the stigma, is likely to experience an increased need for social support. Caplan (1981) observes that individuals under stress show a spontaneous increase in their affiliative needs. The availability and adequacy of social support is beneficial for a person with cancer (Wortman, 1984); and plays a major role in effective coping (Norbeck, 1981). Social support may affect the outcome not only by regulating feelings, but also by enhancing the individual's opportunity to verbalize concerns during times of stress, clarify feelings and activate problem-solving coping styles (Dunkel-Schetter and Wortman, 1982). Social support could, to some degree, place the individual in better contact with his/her emotions and promote successful psychological orientation toward the disease. Social support will be an outlet in sharing fears and exchanging information, and will act as an avenue for sharing concerns. It provides the individual with diagnosis of cancer with identity and feedback, and reduces feelings of loneliness and isolation.

Social Support and Coping Style

Lazarus and Launier (1978) ascribe a great emphasis to apparisal and consider it the critical determinant of the coping process. There is no "best" way to cope with cancer, but some

coping styles are less defensive and reflect more mastery of the situation than others. It reflects a balance of what the individual with cancer can accept or confront.

A person who copes effectively is the one who is less vulnerable and who accepts the diagnosis and treatment of the disease. The individual who copes positively talks with others and clarifies the feelings of concern. The individual who copes less effectively is the one who presents himself or herself as pessimistic and gives up easily, expecting little or no support. This type of individual continues to become vulnerable to poor resolution and greater mood disturbances which lead to less effective coping. Strong social support gives the individual openness and a confident outlook which are assets for problem solving (Caplan, 1981).

According to Weisman and Worden (1976) a "positive coper" uses high problem solving, seeks information mutually with others, has low incidence of mood disturbance, and is less vulnerable. In contrast, the "poor coper" uses blaming and talks very little, and refuses to acknowledge more than a minimum amount about the illness situation.

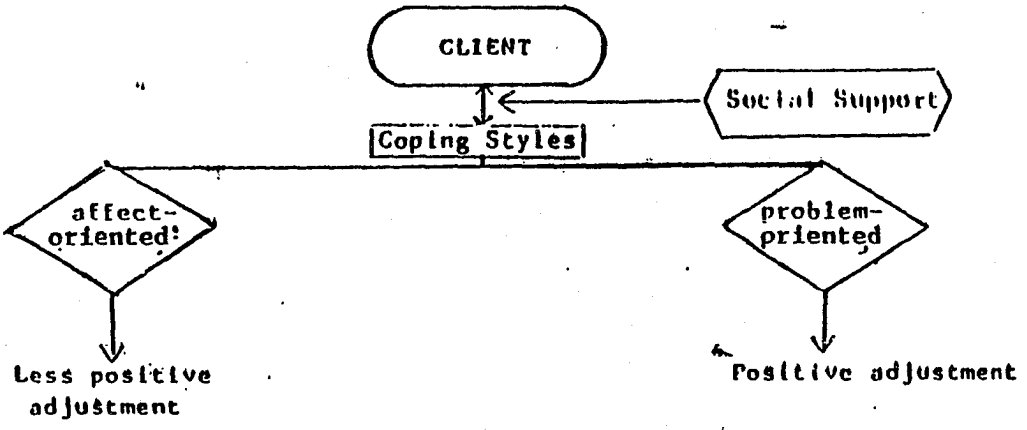
Norbeck (1981) suggests a model to incorporate social support into nursing practice. Her model evolves around people, environment, health-illness, and nursing actions (assessment, planning, intervention, and evaluation). The assessment is done by weighing the needs for social support versus the actual social support. The nurse needs to identify the coping behaviors

exhibited by individuals, and assess whether these behaviors are potentially effective or ineffective coping styles. The nurse makes the judgement as to whether or not the behaviors implied will have a potential for healthy or unhealthy consequences. Intervention to facilitate and utilize healthy coping behaviors is essential. Efforts should be aimed at developing a variety of interventions designed to enhance social support for the individual with inadequate social support. For example, the individual might be assisted to consider persons for support who are presently in his/her network. When social support needs cannot be met, supplementary sources of support through mutual help or support groups may be effective (Norbeck, 1981); or, arranging for contact with persons who have experienced the same illness may be beneficial. Support also can be provided directly by the professional. These interventions are aimed at decreasing the likelihood of negative outcome.

In summary, the conceptualization of this study suggests that the individual with the diagnosis of cancer is under stress, social support plays an active role in assisting the individual to cope effectively with cancer (stressful situation). Social support enables the individual to use problem-oriented coping style. The model depicting events which lead to positive or less positive adjustment can be seen in Figure 1.

FIGURE 1

Social Support and Coping Styles



RESEARCH HYPOTHESES

For the individual with a diagnosis of cancer:

Hypothesis one: There is a relationship between the degree of functional properties of social support and the frequency of use of problem-oriented coping style.

Hypothesis two: There is a relationship between the degree of functional properties of social support and the extent of positive affect.

Hypothesis three: There is a relationship between the network properties of social support and the frequency of use of problem-oriented coping style.

Hypothesis four: There is a relationship between the network properties of social support and the extent of positive affect.

THEORETICAL DEFINITIONS

Problem oriented coping style strategies in which the individual with the diagnosis of cancer attempts to deal directly with the stressful situation.

Affective oriented coping style: strategies in which the individual with the diagnosis of cancer attempts to handle the distressing emotions or affect evoked by the stressful situation rather than resolving the situation itself.

Social support is conceptualized as one or more of the following:

A. expression of positive emotion or feeling of one person towards another.

B. the giving of symbolic or material aid to another.

C. assertion or endorsement of one person's behaviors, perceptions, or expressed views (Kahn, 1979).

Positive affect: a positive predominant emotion such as joy, contentment, vigor, and affection.

Negative affect: a negative predominant emotion such as anxiety, depression, guilt, and hostility.

OPERATIONAL DEFINITIONS

Functional properties of social support consist of:

Affect -- the degree to which the social support system makes the individual feel liked or loved and respected or admired.

Affirmation -- the degree to which the individual can confide in people in the social support system and receive support from the social support for his/her actions or thoughts.

Aid -- the amount of assistance in material goods (such as money) or symbolic assistance (such as rides to doctor appointments) that the social support system provides.

Network properties consist of:

Size -- the number of people listed as social support to the individual.

Duration -- the period of time the individual with cancer has known the listed people in the social support system.

Frequency -- the amount of time spent with individuals listed in the social support system.

Other definitions are:

Affective-oriented coping styles: the frequency of use of strategies assigned to this style.

Problem-oriented coping styles: the frequency of use of strategies assigned to this style.

Positive affect: frequency with which joy, contentment, vigor, and affection are experienced.

Negative affect: anxiety, depression, guilt, and hostility are experienced.

CHAPTER II

LITERATURE REVIEW

Coping and Social Support

The literature supports the assumption that there is a positive relationship between the quality of an individual's social support and the ability to cope. Researchers have investigated social support and its effect as a buffer under a variety of situations such as chronic illness, bereavement crisis, loss, drug abuse, and mental disorder. In this review the main focus will be regarding social support and the cancer patient.

Weisman and Worden (1976) studied the coping behaviors of 120 cancer patients in the first 100 days after the diagnosis was made. Results point to the negative relationships between the extent of social support and emotional distress and marital problems. The presence of strong social support was viewed as a psychosocial asset that contributed to successful coping. Similar findings were reported in a study of 84 terminal patients (Carey, 1974). Subjects were interviewed by hospital chaplains. Emotional adjustment was the dependent variable, it was measured with six questions which chaplains rated on a scale from 1 to 3, based on patients' words or behaviors, as well as on information obtained from the staff and patient's families. The study suggested that giving the opportunity to talk openly and honestly with other person facilitated effective coping when terminally-ill patients were accepting impending death (Carey, 1974).

Maquire (1976) compared the psychological and social problems of 94 women who had mastectomies with subjects who were diagnosed following biopsy with benign breast disease. Taped interviews and a rating scale were completed by interviewers. Results indicated that the husband's reaction was crucial to early adjustment, especially in women who regarded the breast as essential to their attractiveness. A significant difference was found between the mastectomy group and the benign disease group in marital and interpersonal relationships and work adjustment.

In a study done by Holland, Plumb, Yates, Harris, Tattalomando, Holmes, and Holland (1977) 52 subjects were assessed for their psychological response and adaptation to a protective environment ("germ-free") setting. Psychological assessment was based on nurses' observations, diaries kept by the subjects when in the unit, clinical records, and a forced-choice questionnaire. Subjects described the most significant psychological deprivation as not being touched by others and as the inability to touch others.

Jamison et al., (1978) conducted a study of 41 subjects who had mastectomies. Twenty-two months post mastectomy, each subject was given a questionnaire to examine emotional response before and after the surgery. The investigators examined the perception of the effect of mastectomy on the relationships with significant others and health-team members. Results demonstrate that social support is an important variable for mastectomy adjustment. Similar findings were also reported by Bloom, Ross,

and Burnell (1978), who conducted an experiment to demonstrate the benefit of an intervention program for support. Eighteen women who had mastectomies prior to participating in the support program were compared to 21 women who had mastectomies during participation in the support program. Wellisch, Jamison, and Pashau (1978) utilized the same instrument and questionnaire in a study of men whose wives or partners had mastectomies. The questionnaire was mailed to 31 men, and a return rate of 15% was obtained. Of the respondents, 56.6% reported little involvement in the care of their partner with cancer; 23.3% indicated that they would like to have more involvement, and 73.3% were satisfied with the amount of involvement, while 3.3% wished less involvement. Despite the small response rate, the findings suggest that the husband or partner has the desire to be included in the care of the cancer client.

Clark (1983) studied 171 subjects who were adapting to cancer. The patients were assessed for 18 months in regard to the experience of living with cancer and the effect of their social support systems on adjustment. Results indicated that subjects who had strong social support adjust to cancer more easily in terms of adaptation to every day activity.

A study was done by Funch and Mettlin (1982) of 151 female breast cancer patients 2-12 months after surgery. Subjects were interviewed regarding the relationship between support and short-term recovery. Findings of this study suggest there is a

relationship between social support and psychological adjustment. Social support was related to an increase in positive affect and a decrease in negative affect.

Providing the opportunity for individuals who have cancer to ventilate their negative feelings may encourage more effective coping style. Availability of social support may assist the individual by exploration and clarification of emotional reactions and concerns which will activate problem solving. The literature shows that the opportunity to communicate is still a major problem that cancer patients experience. Mitchell and Glicksman (1977) conducted an interview study of 50 subjects undergoing radiation therapy. The overall results showed that 86% of the subjects generally wished they were more able to discuss their situation with someone. Similar results were suggested in a study done by Sanders and Kardinal (1977). Six leukemic patients were interviewed at one-month intervals over a six month period to determine patterns of coping. Subjects indicated little open communication with their family concerning illness and the outcome. Three adaptive coping behaviors were identified: denial, anticipatory grieving, and identification. Denial was considered effective coping behavior when it permitted the maintenance of self-image, and allowed the subject time to work through the loss of previous roles and adapt to a new role. However, denial became less effective when the subject disregarded clear-cut evidence of recurrent disease.

Peters-Golden (1982) examined the perception of social support of 100 women who had breast cancer and 100 healthy subjects. The results indicated the healthy subjects assume that it is inappropriate or harmful for cancer patients to discuss their feelings about their illness. They also reported that patients were considered as being less adjusted if they did discuss their feelings. Quint (1965) interviewed 21 subjects who had mastectomies postoperatively. Subjects reported that family, friends, and the health care team did not permit open communication and blocked them from discussing their illness.

Kaplan et al., (1973) investigated 16 couples who were experiencing a terminal illness of a child. The families were interviewed regarding overall family communication. The researchers found that coping styles of the parents influenced the coping styles of their children. Kaplan et al., (1973) illustrated that coping is a family matter and if the family is not participating in the care, discrepancies in coping occur. These discrepancies may lead to poor communication and weaken the family relationships.

Leiber, Plumb, Gersienzane and Holland (1976) studied 38 subjects (16 female, and 22 male) who were receiving chemotherapy and 37 of their spouses to assess any changes in their desire for affection since the illness. Each subject was interviewed and completed two questionnaires. The results indicated that special attention should be paid to the psychological status: (1) the male patients' needs are poorly met and perhaps infrequently expressed,

(2) couples expressed a desire to be afforded the opportunity to satisfy their affectional need when one member was undergoing treatment.

Wood and Erap (1978) studied social support and its mediating effects on physical complications. Two dimensions of social support are helping and listening. Forty-seven mastectomy patients were interviewd immediately post-operatively and after four years. Results indicated that social support had a mediating effect on physical symptoms and depression. The higher the level of social support, the less physical symptoms and depression the subject experienced.

Weisman and Worden (1975) investigated 35 patients with cancer as to whether psychological differences could account for the subjects' survival. Their results indicated the longevity in cancer subjects was significantly correlated with maintenance of active and mutually-responsive relationships. In contrast, shorter survival was found among subjects who reflect long-standing deprivation and depression and destructive relationships. A similar finding was reported by Derogatis et al., (1979). They studied 35 women with metastatic breast cancer. Subjects received a battery of baseline psychological tests. Subjects who lived longer tended to be able to externalize their negative feelings with people in their environments. Long-term survivors manifested higher scores on the four negative affect measures (depression, hostility, anxiety, and guilt). Subjects who survived longer appeared more capable of externalizing their negative feeling.

Social support may have a buffering effect, but if stress is prolonged, social support may have a negative effect. A longitudinal study done by Revenson, Wollman, and Felton (1983) examined the relationship between naturally-occurring, supportive behaviors, and psychological adjustment to illness. Thirty-two non-hospitalized adult cancer patients were interviewed on two occasions, seven months apart. Although support appeared to have a few effects on adjustment for the sample as a whole, there were differing results for subgroups. The data indicated that even with social support there was a poor adjustment to the disease for those with many limitations on physical functioning; however, supportive behaviors were related to effective adjustment for subjects not currently undergoing treatment. Similar findings were obtained by Wood and Erap (1978), who reported that social support does not seem to affect depression levels when physical complications were high. Yet, when complications were low, significantly fewer depression symptoms were reported by subjects who had high levels of social support. Researchers suggest that social support may act as a buffer until a critical threshold is reached.

Drawn from the literature review, it can be seen that social support can be useful in terms of providing the stressed individual an opportunity to express the emotional reaction and concern about the illness situation. It assures the individual that he/she is loved and valued regardless of the illness situation. This can be conveyed in interactions between the stressed individual and

his/her personal relationships. Lack of the confiding relationships are major issues, for poor communication could lead to poor recovery and short-term survival.

Social Support and Coping Style

In the review of the literature, it was found that researchers have not fully examined the effect of social support on coping style. Limited studies have investigated the role of social support in effective coping. Due to the limitations of research about individuals with a diagnosis of cancer, other research will be reviewed for this purpose.

Tolsdorf (1976) was the first psychologist to employ social support for studying the coping process. The author studied two groups of ten male hospitalized psychiatric patients and ten male medical inpatients matched on demographic variables. The author examined coping with stressful life events, taking in consideration the individual cognitive and behavioral responses and their utlization of social support. Results indicated that failure of the psychiatric patients to develop strong social support led to ineffective coping ability and mental problems.

A descriptive study of 30 subjects with chronic genitourinary cancer was done by Scott, Oberst and Bookbinder (1984). The study was designed to examine stress levels in response to periodic diagnostic procedures (e.g., cystoscopy) and its effect on problem-solving abilities. Problem-solving ability was measured by the Critical Thinking Appraisal (Scott et al., 1984). Findings

indicated that subjects with higher problem solving ability are those who seemed to cope most effectively in terms of adequate resolution of the problem. One-third of the men who experienced high stress levels were characterized by low problem-solving ability and lack of problem resolution (Scott, Oberst and Bookbinder, 1984).

A study done by Folkman and Lazarus (1980) on 100 community residing people focused on how they coped with the stressful events of daily living during one year. A monthly interview and a self-reported checklist completed before each interview were the tools. The method of coping was described as a range from problem-focused coping to emotion-focused coping. Results indicated that work-related stress was associated with increased problem-oriented coping, while health-related stress was associated with increased affective-oriented coping.

Billings and Moos (1981) conducted a mailed survey of 360 randomly-sampled families. They obtained a response rate of 82%, which was comprised of 294 families. The investigators examined the individual coping response to stressful life events, and social resources as intervening processes mediating the effect of life events on personal functioning. Results indicated that people employed somewhat more problem-focused than emotion-focused coping. Coping and social resources, especially qualitative indices, seemed to play important roles in maintenance of adequate functioning. For example, results showed that people who use

avoidance coping responses have fewer social resources. The overall results indicated the individual response to stressful events will be affected by the nature and context of available social resources and the individual coping process.

Pearlin and Schooler (1978) conducted scheduled interviews with a sample of 2,300 people representing an urbanized area of Chicago. The authors examined coping mechanisms people employed in dealing with marriage, parenting, household economics, and occupations. Results indicated that individuals' coping was most effective when dealing with problems in the close interpersonal areas like marriage and least effective when dealing with impersonal problems found at work. Interestingly, results indicated that women who are less educated and who earned low income were more likely to use less effective coping (e.g., ignoring) than men. It appears that based on the traditional sex role conception, women are more likely to use emotion-oriented and less likely to use problem-oriented responses than are men.

A study done by Bloom (1982) indicated similar findings. A sample of 133 women with cancer of the breast were interviewed for the purpose to investigate whether social support system would improve the subject's ability to cope. Results indicated that subjects who had greater social contact used fewer modes of distress in order to cope with having cancer of the breast.

Hirsh (1980) conducted a study of two groups of women. The first group was 20 recently widowed young women and the second group was comprised of 14 mature women who returned to

college. Subjects were mailed the social network list and underwent an approximately two hour long semistructured interview which was held in their own homes. The findings of the study indicated that helpful support enhanced adaptation to stress and assisted cognitive guidance (advice, explanation, and information). Helpful guidance facilitated effective strategies for coping in dealing with complex and ambiguous changes. Social support gives a feedback under conditions of uncertainty which provides effective support and enhances adaptation (Hirsh, 1980).

Tucker (1982) conducted an interview study with 170 women and 202 men entering the heroin addiction treatment programs in Miami, Detroit, and Los Angeles. Women, as well as men, were more likely to use discussion as a coping strategy, but absence of support was associated with use of non-social and potentially dysfunctional coping strategies such as drinking and drug usage. Results also indicated that women are more driven by social consideration than men.

Jalowiec and Powers (1981) conducted a study of fifty volunteers who agreed to be interviewed. The fifty subjects consisted of two groups. The first group was comprised of newly-diagnosed hypertensive patients and the second group were patients seeking care at the university emergency room for non-serious acute illnesses. Results were comparable in both groups. Each group was found to place more emphasis on solving the problem or handling the situation than on the emotional distress

accompanying the stressful situation. Both groups rated seeking help and comfort from significant others as a middle range coping tool.

Baldree, Murphy and Powers (1982) conducted a study of 35 volunteer patients on hemodialysis. The authors explored the relationship between treatment-related stress identified by dialysis patients and coping styles used. Coping styles were assessed by the use of a coping scale developed by Jalowiec and Powers (1981). Results indicated that subjects used problem-oriented methods in handling stress. Subjects put more emphasis on solving the problem than on relieving the emotional distress accompanying the stressful situation.

In summary, the fear and uncertainty associated with the disease bring to mind the family and friend who are more likely to understand the individual emotional expression of need and communication. The greater accessibility of social support allows individuals with the diagnosis of cancer to be engaged in social comparison by looking at others' reactions and to judge the appropriateness of their own reactions to stress. How the social support affects the coping style preference is not explored clearly in the literature, yet some researchers' results indicated that strong social support led to problem-solving, and to effective coping.

CHAPTER III

Methodology

Design and Instruments

A descriptive correlational design was used to examine the relationship between the social support of individuals with a diagnosis of cancer, their coping styles, and emotional status. The social support of the sample was measured by the Norbeck Social Support Questionnaire (NSSQ) designed by Norbeck, Lindsey, and Carrieri (1981) (See Appendix A). With this self-administered scale, each respondent is asked to list the significant people in his/her life. After listing up to 20 network members, the respondent is asked to answer eight questions as they pertain to the 20 persons listed.

The first six questions measure the total functional component which consists of affect, affirmation, and aid. Questions seven and eight measure the network properties variable by addressing duration and frequency of contact. The number of network members listed is also part of the subscale of network properties.

The respondent is asked to rate each of the network members on a Likert scale ranging from 1 ("not at all") to 5 ("a great deal"). The subject's rating for each network member on a given question is added to determine the score for that item. The score of the functional properties is arrived at by adding the responses to the first six questions which pertain to affect, affirmation, and aid. The score for the network properties is

arrived at by adding the number of people in the network list, the score of question 7 (duration) and the score of question 8 (frequency). The instrument requires an average of ten minutes to be completed.

Reliability has been reported based on administration to 75 non-patient individuals. Each of the functional component items and network properties items had a high degree of test-retest reliability; the coefficient ranged from .85 to .92 (Norbeck, Lindsey, and Carrieri, 1981). To further examine sensitivity and stability, the NSSQ was mailed to the same 75 non-patients, who participated in the first testing (Norbeck et al., 1981). A return of 44 completed questionnaires (65%) was obtained. The correlation between the first testing and the seven month follow-up testing ranged from .58 to .78. This represented a moderately high degree of stability over time (Norbeck et al., 1983).

The emotional status was measured by the Affect Balance Scale (ABS), an instrument developed by Derogates (1975). This scale was designed to assess a subject's emotional status. The ABS is an independent multi-dimensional test, consisting of a 40 item checklist, which requires 3-5 minutes to complete. Responses range from 0 ("never") to 4 ("always"), reflecting the degree to which a specific emotion is experienced. This self-report scale is composed of four negative affects (anxiety, depression, guilt, and hostility), and four positive affects (joy, contentment, vigor, and affection). Negative affects and positive affect are each measured by 20 items. A scale score is obtained

by dividing the positive and negative totals by 20, and subtracting the negative score from the positive score. A score greater than zero reflects a more positive affect, while a score less than zero reflects a negative affect. Cronbach's Alpha reliability for the subscales, based on a study of 355 heterogenous psychiatric inpatients ranged from .78 (anxiety) to .92 (joy). The coefficient for the negative scale was .92 and for the positive scale, .94 (Derogates, 1978).

The Jalowiec Coping Scale (1979) was used to measure problem-oriented coping strategies and affective-oriented strategies (see Appendix B). For this study only problem-oriented coping strategies scale was utilized. The scale is composed of 40 coping strategies which were selected based on a comprehensive and critical review of the literature on stress, coping, and adaptation (Jalowiec, Murphy, and Powers, 1984). The degree of use of coping methods is rated on a 1 to 5 ordinal scale, ranging from never to always. Reliability of the scale has been reported on two populations using test - retest methods. Reliability coefficients of .79 for the total coping score, .86 for the affective-oriented scores, and .85 for the problem-oriented scores were obtained from a sample of 28 subjects from a general population retested after a two week period. The second group consisted of 30 subjects, with retesting occurring after a one month period. Similar coefficients were reported by Langner (1983) using one month retest interval and 30 subjects. To examine internal

consistency Cronbach's Coefficient Alpha was computed at .86 when testing occurred with 141 subjects. These subjects included hypertensive and emergency room patients, a general population (Jalowiec and Power, 1981), and dialysis patients (Baldree, et al., 1982).

Subjects

After Human Subjects Committee approval, a convenience sample of 35 patients diagnosed with cancer who were undergoing chemotherapy were recruited from the office of an oncologist. This office was located in a midwestern community with a population of 56,000. Subjects were enrolled in this study without regard to their date of diagnosis and represented all types of diagnoses.

Fourteen female and twenty-one male subjects with a mean age of 55.7 took part in the study. Demographic data on the subjects were representative of the community in which the study took place (See Table 1). In this study subjects had identified their ethnic background as Native American (48% of the sample). It appears that subjects had misidentified their ethnic background in relation to the total population.

Two individuals declined to be part of the study, stating they were too sick to participate. Three questionnaires were eliminated from the study because they were not complete.

Table 1

Demographic Characteristics

Sex	N	Percent
Male	21	60%
Female	14	40%
Marital Status		
Single	4	11%
Married	23	66%
Divorced	0	0%
Widow	8	23%
Education Level		
Grade School	10	29%
High School	18	51%
College	5	14%
Graduate	2	6%
Ethnic Background		
Asian	0	0%
Black	2	6%
Caucasian	18	46%
Hispanic	0	0%
Native American	17	48%

Religion		
Protestant	26	74%
Catholic	6	17%
Jewish	0	0%
Other	2	6%
None	1	3%
Participation in Religious Activities		
Inactive	7	20%
Infrequently/Yearly	10	29%
Occasionally/Monthly	7	20%
Regularly/Weekly	11	31%
Age Group		
20-29	1	3%
30-39	2	6%
40-49	1	3%
50-59	11	31%
60-69	16	46%
70-79	3	8%
80-89	1	3%

Type of Cancer		
Lymphoma	10	28%
Breast	8	23%
Leukemia	2	1%
Lung	5	14%
Colon	4	11%
Uterus	2	6%
Prostate	1	3%
Adrenal	1	3%
Kidney	2	6%

Procedure

On a daily basis, the researcher asked the Registered Nurse working in the oncologist's office to identify those individuals who were scheduled to receive chemotherapy that day. While the subject was waiting in the treatment room by herself/himself, a verbal explanation of the study was given by the investigator (see Appendix C) and the subject was asked to sign a consent form (see Appendix D). The issue of confidentiality, and the right of the individual not to sign the consent form or to participate were discussed with the subjects; making it clear that this decision would not affect his/her medical care.

The patient was left alone to fill out the three questionnaires, with the researcher returning in ten minutes to answer questions if necessary. Approximately 20-30 minutes was required to complete the questionnaires.

CHAPTER IV

Results

A cross sectional descriptive design was used to examine the relationship between the social support of individuals with the diagnosis of cancer, their coping styles, and their emotional status. Four research hypotheses were tested using the Pearson Product-Moment Correlation Coefficient. A relationship was considered significant if the alpha level of probability was computed to be .05 or less.

When the Pearson Correlation Coefficient was computed to test these hypotheses, there were no significant relationships noted between any of the variables. (See Table 2)

Hypothesis one: There is a relationship between the degree of functional properties of social support and the frequency of use of problem-oriented coping style.

Hypothesis two: There is a relationship between the degree of functional properties of social support and the extent of positive affect.

Hypothesis three: There is a relationship between the network properties of social support and the frequency of use of problem-oriented coping style.

Hypothesis four: There is a relationship between the network properties of social support and the extent of positive affect.

Table 2

Results of the Four Tested Hypotheses

		r	p
1.	The relationship between the degree of functional properties of social support and problem-- oriented coping style	-0.15	ns
2.	The relationship between the degree of functional properties of social support and positive affect.	-0.17	ns
3.	The relationship between the degree of network properties of social support and probelm-- oriented coping style.	-0.12	ns
4.	The relationship between the degree of network properties of social support and positive affect.	-0.11	ns

ns = not significant

Further analysis was done to explore the difference between the sexes and educational levels in us of (a) the functional properties, (b) the network properties of the social support, (c) emotional status, and (d) coping style. When t-tests were calculated there were no statistically significant differences found.

The variable, problem-oriented coping style was further examined to determine how subjects responded on a 1 to 5 scale (see Table 3). There were certain problem-oirented coping style items which a high percentage of subjects (60%) identified as never or occasionally used. For example, 28 out of the 35 subjects (80%) stated that they did not want "someone to solve or handle the situation for them." Twenty-two of the 35 subjects (63%) responded that they did not want "to do anything just to do something, even if they were not sure it would work." Twenty-one out of the 35 subjects (60%) responded that they did not want "to talk the problem over with another person who had been in the same type situation."

Problem oriented coping style items which subjects used often or almost always were also examined. Eighty-three percent (29 of the 35 subjects) wanted "to maintain control over the situation and tried to look at the problem objectively." Twenty-six of the 35 subjects (74%) wanted "to accept the situation as it was." Seventy-one percent (25 out of the 35 subjects) wanted "to find purpose or meaning in their situation." Sixty-six percent

(23 out of the 35 subjects) wanted "to find out more about their situation so they could handle it better."

Table 3

Number of Subjects Responding to Each Problem Oriented Coping Style Item

Coping Style	Never (1)	Occasionally (2)	About Half the Time (3)	Often (4)	Almost Always (5)
Think through different ways to solve the problem or handle the situation.	3	10	6	8	8
Let someone else solve the problems or handle the situation for you.	17	11	3	3	1
Do anything just to do something, even if you're not sure it will work.	7	15	6	4	3
Talk the problem over with someone who has been in the same type of situation.	8	13	5	8	1
Accept the situation as it is.	1	5	3	11	15
Try to look at the problem objectively and see all sides.	0	1	5	20	9
Try to maintain some control over the situation.	1	1	4	16	13
Try to find purpose or meaning in the situation.	4	2	4	13	12
Actively try to change the situation.	3	9	5	8	8
Try to find out more about the situation so you can handle it better.	0	6	6	8	15
Try out different ways of solving the problem to see which works the best.	2	10	4	10	9
Try to draw on past experience to help you handle the situation.	3	14	2	11	5
Try to break the problem down into smaller pieces so you can handle it better.	4	12	3	12	4
Set specific goals to help you solve the problem.	1	9	8	9	8
Settled for the next best thing to what you really wanted.	5	13	5	5	7

The Mann-Whitney U test was used to determine if there was a significant difference in the use of specific coping strategies by males and females and by people with various levels of education. The difference was considered significant if the alpha level of probability was computed to be .05 or less. It was found that males tended to want to "Talk about their problem with someone who had been in the same situation" more than females did ($u = 75$, p .02). No other significant differences were found between the sexes in relation to the use of specific problem-oriented coping strategies.

Levels of education were split into two categories in order to determine if education was related to the problem-oriented coping strategies used. Subjects who did not finish high school tended to "Do anything just to do something even if they did not know it was going to work" significantly more often than those who finished high school ($u = 66$, p .02). They also tended to "Settle for the next best thing to what they really wanted" significantly more often than those who finished high school. ($u = 52.00$, $p = .006$). No other significant differences were found in the frequency with which people with different levels of education used the problem-oriented coping style strategies.

A Pearson Correlation Coefficient was computed further to determine the relationship between the functional properties and the network properties of Social Support and each category of the ABS scale (see Table 4). A significant correlation between the functional properties of social support and guilt was found ($r = .33$, $p = .05$). This indicates that subjects identified guilt more often if they had more functional properties of Social Support. No significant relationship between the network properties of social support and the ABS subscales were found.

All subjects in this study described a positive affect as demonstrated by a positive total score on the ABS Scale. The mean score for the total ABS was 1.55 with a standard deviation of 0.75. The Affect Balance Scale was further broken down to determine how the subjects responded to the positive and the negative affect subscales (see Table 5).

Table 4

The Correlation Between the Functional Properties of Social Support and the ABS Subscales.

ABS Scale	r	p
Joy	-.03	ns
Contentment	-.11	ns
Vigor	-.10	ns
Affection	.15	ns
Anxiety	.15	ns
Depression	.12	ns
Guilt	.33	.05
Hostility	.07	ns

ns = not significant

s = significant

Table 5

The Mean Values for Each of the four positive and four negative ABS Scale

ABS Scale	Mean	Standard Deviation
Joy	2.64	0.67
Contentment	2.64	0.61
Vigor	2.24	0.74
Affection	2.82	0.60
Anxiety	1.70	0.55
Depression	1.93	1.06
Guilt	1.01	0.74
Hostility	1.37	0.93

The network properties of social support were examined to identify who the subjects felt were their source of support at the time of the study. All subjects who were married or engaged (66% of the sample) identified their spouse or fiance as a source of support. Table 6 further breaks down the categories identified as supportive to each of the subjects.

Table 6

The Percent of Subjects Listing Each Category of Social Support

Source of Support	n	Percent
Spouse of fiance	24 of the 35	69%
Family	34 of the 35	97%
Friend	26 of the 35	74%
Work Associate	6 of the 35	17%
Neighbor	6 of the 35	17%
Health	4 of the 35	11%
Counselor	1 of the 35	3%
Minister	7 of the 35	20%
Other	2 of the 35	6%

In summary, when Pearson Correlation Coefficients were computed, no significant relationships were found in the four tested Hypotheses. The Mann-Whitney U was done to test the difference between the sexes and educational levels in use of coping strategies and emotional status. These findings will be discussed further in the next section.

CHAPTER V

Discussion

A descriptive cross-sectional design was used to determine the relationship between the social support of 35 subjects undergoing chemotherapy, the coping style used, and their emotional status.

This study failed to find a relationship between social support and the coping style used. The review of the literature demonstrates conflicting results in regard to this relationship. Many have shown that there is a relationship between social support and the ability to cope (Bloom et al., 1978; Clark, 1983; Kalpan et al., 1973; Tolsdorf, 1973). Reverson et al. (1983) and Wood and Erap (1978), however, found no significant relationship between the patient's social support system and the ability to cope with the disease. Both of these studies were conducted with subjects diagnosed with cancer. These authors stated that when the complication rate was higher or when many limitations on physical function were present, the social support system did not enable patients to adjust to the disease.

Subjects, in this present study, were undergoing chemotherapy which results in many physical limitations. This may be the reason that the results of this study were similar to those of Reverson et al., (1983) Wood and Erap (1978).

One can only imagine why patients with greater physical limitations do not utilize their support system in the coping process.

In clinical practice, it appears that patients who demonstrate greater physical limitations also demonstrate a greater degree of anger. Kubler-Ross (1969) identifies anger as one of the stages of the grieving process. It appears that when a patient is experiencing anger, they are not utilizing the support system. In fact, they seem to block it out. Although patients were able to list people in their social support system, they were apparently unable to utilize them in the coping process.

Research concerning these concepts would be very helpful in understanding the relationship between social support and coping style utilized. It would be interesting to make note of the date on which cancer was first diagnosed as well as the date of institution of chemotherapy. The longer the chemotherapy was instituted may have resulted in many physical limitations. This may have a direct effect on the ability to utilize social support.

In addition, this study failed to support that there is a relationship between network and functional properties of social support and the extent of positive affect. Subjects tended to have a positive affect as demonstrated by a positive score on the ABS scale regardless of the presence of social support. A study done by Derogatis et al., (1979) showed cancer patients with short-term survival rate revealed a significantly higher level of positive affect than did the long-term survivors.

Patients who survived longer appeared more capable of

externalizing their negative feelings. Despite this, it has been supported in the literature that cancer patients are incapable of outward expression of their negative feelings such as anger and aggressiveness (Derogatis et al., 1979; Mitchell and Glicksman, 1979; Peters-Golden, 1982; Sander and Kardinal, 1977). It appears that people believe they should be optimistic and cheerful in their interaction with others. Such conflict may result in failure to openly communicate their true feelings. Results suggest that the opportunity to discuss feelings, particularly negative ones, is imperative in the holistic care of these patients.

Four problem-oriented coping styles were identified as being used most often by the 35 cancer subjects. One of these, "Try to maintain some control over the situation," was identified as often or almost always used by 83% of the sample. The attempt to maintain some degree of control has been supported by other research (Baldree et al., 1982; Jalowiec and Powers, 1981). These studies examined the coping style used by subjects on hemodialysis and with hypertension respectively. In both of these studies the subjects ranked the need for control as the number one coping strategy used. This demonstrates that chronically ill patients tend to concentrate on the element of control in coping with the stress of their disease. Since cancer is also a chronic disease it follows that these patients would also feel the need for control. Literature supports the fact that the diagnosis of cancer contributes to a sense of loss of control

(Bloom, 1981). This need for control must be kept in mind when planning the care of patients undergoing chemotherapy. By involving the patient in planning his/her own care, a patient may feel that s(he) is in more control of the situation. Allowing for individual choices and participation in his/her own care may offer a chance to have a greater degree of control over his/her health care.

The second problem-oriented item "Accept the situation as it is" was identified as often, almost or always by 74%. In the study conducted by Baldree et al., (1982) hemodialysis subjects ranked it as the third most often used coping strategy. It was ranked as the eighth most often used coping strategy among hypertensive subjects (Jalowiec and Powers, 1981). Since the patients in this study stated that accepting the situation is an important coping strategy for them, it follows that they are willing to try to come to terms with their disease. Nurses can be instrumental in helping them in this process of acceptance. Providing an opportunity for the patient to ventilate feelings, crying with the patient, etc. may allow the patient to accept the situation more readily. As pointed out previously, patients have difficulty discussing their disease with their families (Sanders and Kardinal, 1977; Peters-Golden, 1982), making it more important for the health care team to provide this support.

The coping style item "Try to find purpose or meaning in the situation," was identified by 71% of the subjects as being

used almost or always. In studies conducted by both Baldree et al., (1982) and Jalowiec and Powers (1981) subjects ranked this coping style item as the sixth most commonly used. This again stresses the importance of allowing patients to ventilate their feeling in the process of working through their stressful situation and coming to terms with it.

Sixty-six percent of the cancer subjects in this study identifed "Try to find out more about the situation so you can handle it better" as being used often or almost always. Hemodialysis patients in the Baldree et al., (1982) study ranked this coping style item as the sixth most commonly used. Hypertensive and emergency room patients ranked it as the second most commonly used coping strategy. This, then, appears to be important to all of the patients tested. Nursing must be aware of the importance of providing patients with information as they show evidence of being able to assimilate it. This may, in fact, not only increase their knowledge base, but help them cope with their illness as well.

An item which was identified as being used seldom or never by 80% of the subjects was "Let someone else solve the problem or handle the situation." This indicates again that subjects have a strong need to maintain some control over their situation. In studies conducted by both Baldree et al., (1982) and Jalowiec and Powers (1981), subjects rated this coping item as the one least often used. A possible explanation for this finding may be,

again, a need for a sense of control over their situation. Gal and Lazarus (1975) stated that taking action during a stressful situation can increase a sense of mastery and control. This again brings out the importance of involving patients in planning and carrying out their own care. Patients apparently do not want others to take the problem from them, but, instead, to work with them in the resolution.

Sixty-three percent of the respondents stated that they never or occasionally used the coping strategy "Do anything just to do something, even if you're not sure it will work." In the studies done by both Baldree et al., (1982) and Jalowiec and Powers (1981) subjects ranked this item as their second lowest coping style item used. To analyze the result further the Mann-Whitney U test was computed. It was found that there was a significant difference in the frequency of the use of this item by people who had finished high school and those who did not. Subjects who did not finish high school used this coping strategy significantly more often than those who did ($u = 65$, $p = .02$). It was also found that subjects who did not finish high school used "Settled for the next best thing to what you really wanted" more often then those who did ($U = 51$, $p = .006$). These findings support the need for providing rationale for actions which are undertaken during the care. It also stresses the need to explore other alternatives with the patient so that the actions which are taken are more meaningful to him/her. The less educated people

may, in fact, need more assistance in the identification of other alternatives than do the more educated.

The coping item "Talk this problem over with someone who has been in the same type of situation" was identified as being used only occasionally or never by 60% of the respondents. This finding was also supported by Baldree et al., (1982) and Jalowiec and Powers (1981). In their studies this item was ranked among the five least used of the coping items. To analyze the result further the Mann-Whitney U test was computed to examine difference in use by men versus women. Male subjects used this coping strategy significantly more often than females did ($u = 75$, $p = .02$).

In studies done by both Billing and Moos (1981) and Pearlin and Schooler (1978) it was again found that there was a significant difference between the sexes in the coping style used.

Although the literature stresses the benefit to all patients in talking to someone with similar problems (Mitchell and Glicksman, 1977; Sanders and Kardinal, 1977) perhaps attention should be paid to individuals differences. Pearlin and Schooler (1978) stated they thought that males tended to think more concretely while females used more denial in the coping process.

Perhaps in talking to other patients with similar problems, males are able to share concerns face to face and thus reduce their stress through concrete means. A seemingly conflicting finding was uncovered by Linsey et al., (1981). In her study,

post mastectomy women identified other women who had recovered from a mastectomy as an important source of support. It led one to wonder if women receiving chemotherapy are given the same opportunities to meet with other experiencing the same situation. Chemotherapy, being less obvious and more prolonged may not invite the same support from the health professionals as does a surgery such as mastectomy. Further research examining the effect of a support peer on the coping process of women receiving chemotherapy could offer insight into this disparity.

When analysis was done using the Pearson Correlation Coefficient, it was found that there was a significant correlation between the functional properties of social support and the amount of guilt experienced by the patient. Those patients who had more affection, affirmation and aid from their support system, experienced more guilt feelings. Apparently those who have a greater support system feel more guilty. Inequity in the social relationships might bring up feelings of guilt, particularly when those patients do not foresee the possibility of returning the support in the future.

Abrams and Finesinger (1953) found that guilt feelings were frequently relieved by giving the patient an opportunity to discuss them. However, the literature frequently discusses problems in communication between cancer patients and people surrounding them. Patients express a desire to talk with others about their disease and innermost feelings, but sense a resistance on the part

of others to such a discussion. The patient's support system often feels that it is inappropriate or harmful for patients to discuss their negative feelings (Peters-Goldon, 1982).

Nurses, then, need to provide the patient an opportunity to ventilate negative feelings. In addition, the nurse should encourage the individuals in the support system to freely discuss feelings about the cancer. It is, in fact, helpful to the patients in the adjustment process and clarification of the emotional status.

In looking at the composition of subject's social networks they were found to be dominated by family members and friends. Interestingly, few subjects included health care professionals as part of their social support system. Similar findings were found in a study conducted with cancer patients in Egypt (Lindsey, Ahmed, and Dodd, 1985) as well as in spouses of patients with cardiac disease (Johnston, 1985). It is not clear why patients do not consider the health care provider as a support system. Some investigators have discussed problems in communication between cancer patients and health care providers (Abrams, 1966; Parkes, 1974).

Although the results of this study should not be generalized to all cancer patients undergoing chemotherapy, it offers some very important implications for nursing practice. Further research using random selection of subjects may help the nursing profession more completely understand cancer patients and help them cope more effectively with their illness.

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APPENDICES

APPENDIX C
Verbal Explanation for the Subjects

Your doctor has agreed to assist me, a graduate student at Grand Valley State College, in my thesis research. I am particularly interested in doing a study concerning the individual with cancer. This research will fulfill part of my requirements for a master's degree in nursing.

I have designed this study to be conducted at one time-point to learn more about your disease and how you deal with it. I am interested in obtaining your responses because of the significant contribution you can make toward future nursing interactions with those who have cancer. The results obtained will be used in assisting nurses to help the individual with cancer maintain effective coping and positive emotional status. It will be appreciated if you will agree to participate in this study.

Three questionnaires will be completed (the time involved in completing them will be approximately 20-30 minutes). Completion of the questionnaires will not begin until consent forms are signed. The first questionnaire involves listing the people who are significant in your life, and their relationship to you. For each person you list, you will be asked to answer eight questions by writing the number that applies to your response, 1 = not at all, to 5, meaning, a great deal. The second questionnaire is a list of words that describe the way people sometimes feel. Please fill in one of the numbered spaces that describes your experience. The third questionnaire consists of 40 ways to cope with stress. Please circle one number for each item. I will leave you now and come back in five minutes. I ask you to please fill out the questionnaires in the order they are presented.

The information you give will remain strictly confidential. You may change your mind about completing the questionnaires at any time, and this will not affect the care you receive at your doctor's office. I thank you for your time and willingness to participate.

Sincerely,

Dina Hamati, R.N.

APPENDIX D
Consent Form

Your doctor has agreed to assist me, a graduate student at Grand Valley State College, in my thesis research. I am doing a study concerning the invididual with cancer; I have designed this study to learn more about your disease and how you deal with it. This study is being conducted as part of the requirements for a master's degree in nursing. I am particularly interested in your permission to participate in my study because of the significant contribution you can make towards future nursing interactions with those who have cancer, and with their families. I would like you to fill out three questionnaires (which will take approximately 20-30 minutes to complete). I can assure you that your name will never be associated with your data, and you will never be identified.

You may choose not to participate in the study, and you may change your mind about completing the questionnaires at any time. Your care at this office will not change.

Thank you for your time and cooperation. Please sign below to signify your free and informed consent to participate.

Sincerely,

Dina Hamati, R.N.
Graduate Student, Nursing
Grand Valley State College

Patient Signature _____

Date _____

APPENDIX E

MUSKEGON ONCOLOGY-HEMATOLOGY ASSOCIATES, P. C.
LOWELL D. SMITH, M. D.
MANI KURIEN, M. D.
WEST SHORE PROFESSIONAL BLDG.
SUITES 235
1560 EAST SHERMAN BLVD.
MUSKEGON, MICHIGAN 49444

ONCOLOGY-HEMATOLOGY

TELEPHONE
616 - 733-4424

February 25, 1985

Dina Hamati
16173 Suffolk Dr.
Spring Lake, MI. 49456

Dear Ms. Hamati,

I am giving you permission to interview approximately 35 of my patients here at my office in connection with the study that you are doing relating to patients who have cancer. According to the terms we have previously discussed, Dina, you will obtain informed consents and assure that specific patient information be held confidential. I understand that these will mostly be single interviews with patients and that I will have a chance to see the basic questionaire prior to your using this. I do not anticipate a problem with the actual questionaire.

I look forward to your sharing any results from this study with me.

Sincerely,

[redacted]

Lowell D. Smith, M. D.

LDS/ep