# Coping Strategies of Colostomy Patients

Ekiko Sato

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APPROVED:

[redacted]

Linda Felver, Ph.D. , R.N. , Associate Professor, Research Advisor

[redacted]

Christine A. Tanner, Ph.D. , FAAN. , R.N. , Professor, Reader

[redacted]

Susie Frank, M.N. , R.N. , CETN. , Clinical Nurse Specialist,
Veterans Administration Medical Center, Portland, Oregon, Reader

[redacted]

Carol A. Lindeman, Ph.D. , FAAN. , R.N. , Dean, School of Nursing

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# CHAPTER I

## Introduction

In recent years considerable interest in the coping strategies of ostomy patients has emerged. In Japan, the number of ostomy patients has increased during the last five years. There are more than 70 thousand ostomy patients in Japan (Japan Health and Welfare Statistics Association, 1989). Most ostomy surgery in Japan is related to cancer diseases such as colon, rectum, and bladder cancer. In contrast, it is estimated that there are 100,000 ostomy surgeries performed annually in the United States (Klopp, 1990). The ostomy patient is threatened with many potential losses such as loss of normal body function including sexual function and sense of personal loss, as well as major life-style changes.

This research project emerged from the researcher's interested in coping strategies of ostomy patients and the potential use of a coping scale developed by Jalowiec, Powers, and Murphy (1981, 1984, 1989). This research was a first step of measuring coping strategies in ostomy patients. The findings describe the coping strategies in the clinical population.

Broadwell and Jackson (1982) stated that when the alterations in the patients' body functioning and body image become a reality, ostomy patients often have poor psychosocial outcomes ranging from failure to return to occupations, and withdrawal from social and intimate contact, to depression and anxiety. Although the literature over the years has

reflected concern for the physical complications of ostomy surgery, no nursing studies were found which dealt specifically with coping strategies of ostomy patients. Many factors may influence the coping strategies of ostomy patients such as age, gender, personality, religion, his/her prognosis, previous experience with crises, and the quality of available support systems such as family and social support. These factors are different for individuals and interact in a variety of ways to influence a person's coping strategies. The nurse provides nursing care which is tailored to individual needs.

In nursing practice, nurse's assessment is an ongoing process that requires regular evaluation of physical, psychological and environmental factors affecting the coping of the individual ostomy patient. A major aspect of care of the ostomy patient is related to helping him/her cope with integrating a changed image and altered functioning while at the same time coping with learning the management of the ostomy. If nurses understand the focus of an ostomy patient's coping behavior, they can more adequately implement nursing interventions that will promote that behavior or teach new behaviors to the ostomy patient. The ostomy patients' coping needs will also be met allowing them to learn more about their self-care and enhancing the overall healing process.

Turk, Sobel, Follick, and Youkilis (1980) and Hurny and Holland (1985) have identified potential problems of ostomy patients as follows:
1) Management difficulties (e.g., irrigation, leakage, skin irritation);
2) Occupational adjustment (e.g., change in occupation, requirement of additional toilet breaks);

3) Social isolation (e.g., reduction or alteration in recreational or social activities);

4) Marital/sexual adjustment (e.g., reduction in the frequency of sexual activity or diminished sexual drive);

5) Family adjustment (e.g., alteration in family members' roles, discussion of ostomy with other family members); and

6) Emotional adjustment (e.g., depression, anxiety, or feelings of being different).

It is important to study how ostomy surgery impacts a patient's life, how the patient feels regarding the ostomy, and to identify the coping strategies that are used to manage any problems.

## Purpose of the Study

The purpose of this study was to identify the threats that confront colostomy patients and to identify the coping strategies they use to reduce these threats. According to Lazarus and Folkman (1984), threats concern harm or losses that have not yet taken place but are anticipated. Even when a harm/loss has occurred, it is always fused with threats because every loss may develop negative implications for the future. Herth (1990) suggested that an understanding of the important relationship of concurrent losses, threats, and coping strategies provides a beginning base from which to develop appropriate nursing interventions.

# CHAPTER II

## REVIEW OF THE LITETATURE

Coping is a complex phenomenon and is not easily described or quantified, especially for the ostomy patients. Ostomy patients have a unique experience, treatment, and adjustment to change of function and body image. Under these stressors, the individual may be controlled by the situation, feeling helpless and limited in ability to cope. These facts affect not only patients but also families and friends (Shipes, 1987; Sultenfuss, 1982).

The review of literature addresses stress, threat, and appraisals, coping, and coping strategies. Also several categories of coping studies are discussed.

### Stress

The word stress has become useful when studying human behavior. The most classic definition of stress is Selye's theories (Goosen & Bush, 1979). Selye's concepts are centered around the adaptation-syndrome and describe the body's physiological response to stressors. Stressors may arise from sorrowful or joyful situations which present in varying degrees of intensity. When faced with these stressful situations the

individual can respond through neurological, immunological or phagocytic, and hormonal mechanisms (Selye, 1974, 1977).

Lazarus, Deese, & Osler (1952) stated that it is possible to think of stress in terms of situations. The stress of combat to soldiers is an example of why examination of stress to the participants is crucial. People do not react uniformly to these situations (Lazarus et al, 1952). His later work has described psychological stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his/her resources and endangering his/her well-being" (Lazarus & Folkman, 1984, p. 19). He emphasizes that stress is a transaction process between person and the environment and to events that are demanding, threatening, or harmful.

Lazarus and Folkman (1984) have argued that situational factors, including the stressful demands of a situation, play an important role in shaping the coping strategies individuals choose. McCrae (1984) studied and assessed the influence of losses, threats, and challenges on the choice of coping strategies. McCrae found that the type of stressor significantly affects the choice of coping responses, with the most pronounced coping differences between challenging life events that are usually positive and negative events involving loss or threat.

Threat

According to Lazarus (1966), the word "threat" seems ideally suited to express the condition of the person or animal when confronted with a stimulus that he/she appraises as endangering important values and goals (1966). Lazarus defined that threat is subjectively worse than

actual confrontation, and that individuals will make an effort to minimize the period of uncertainly or indecision about the anticipated even before the confrontation (1966). Lazarus (1966) suggested that if threat occurs, we must evaluate the situation, to the effect that a harm is signified. The individual's knowledge and beliefs contribute to appraisal.

Lazarus (1984) further defined threat as "concerns harms or losses that have not yet taken place but are anticipated" (p. 32); "threat appraisals can range from minimal, where little stress is experienced, to extreme, characterized by intense negative emotion such as fear" (p. 167). The extent to which a person feels threatened is in part a function of his/her evaluation of coping resources with respect to internal and external demands in a particular situation, as well as the constraints inhibiting their use (Lazarus & Folkman, 1984).

Appraisal

According to Folkman and Lazarus (1980), appraisal is the cognitive process through which an event is determined. There are two major forms of appraisal: primary appraisal, through which the person evaluates the significance of a specific transaction with respect to well-being, and secondary appraisal, through which the person evaluates coping resources and options. Primary and secondary appraisal converge to shape the meaning of every encounter (Folkman & Lazarus, 1980; Folkman, 1984). Primary appraisals are harm/loss, threat or challenge. Threat and challenge appraisals are independent and likely to occur simultaneously during the anticipatory stage of a stressful event. Secondary appraisal is a udgment concerning, what can I do? In

secondary appraisal, coping resources, which include physical, social, psychological, and material assets are evaluated with respect to the demands of the situation. Social resources represent the individual's social network and support systems. Psychological resources are hope, skills for problem solving, and self-esteem. Material resources are money, tools, and equipment (Folkman et al, 1984).

Folkman, Lazarus, Dunkel-Schetler, Delongis, and Gruen (1986) studied cognitive appraisal, coping and encounter outcomes of community-residing healthy adults using an intraindividual analysis of primary appraisal, secondary appraisal, eight forms of problem- and emotion-focused coping, and encounter outcomes. They measured primary appraisal, secondary appraisal, and coping in 85 married couples using a questionnaire and interview. Results from this study showed that when threat to self-esteem was high, subjects used more confrontive coping, self-control coping, accepted more responsibility, and used more escape-avoidance compared to when threat to self-esteem was low; subjects accepted more responsibility and used more confrontive coping, planful problem-solving, and positive reappraisal in encounters they appraised as changeable, and more distancing and escape-avoidance in encounters they appraised as having to be accepted. Using a multivariate F statistic, satisfactory outcomes were characterized by higher levels of planful problem solving ($p < .01$) and positive reappraisal ($p < .01$), and unsatisfactory outcomes by higher levels of confrontive coping ($p < .10$) and distancing ($p < .10$). Folkman et al (1986) concluded that coping was strongly related to cognitive

appraisal; the forms of coping that were used varied depending on what was at stake and the options for coping. Coping was also differentially related to satisfactory and unsatisfactory encounter outcomes (Folkman et al, 1986).

## Coping

Many conceptualizations of coping have been offered in literature. However, Lazarus's definition of coping is used in the current study (McCrae, 1984; King, Figge, & Harman,1986). Lazarus defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Lazarus et al (1984) emphasized features of this definition: 1) it is process-oriented rather than trait-oriented, as reflected in the words constantly changing and specific demands and conflicts; 2) this definition implies a distinction between coping and automatized adaptive behavior by limiting coping to demands that are appraised as taxing or exceeding a person's resources; 3) the problem of confounding coping with outcome is addressed by defining coping as efforts to manage; 4) managing can include minimizing the threat as well as attempting to master the environment (Lazarus & Folkman, 1984).

## Coping Strategies

Burckhardt (1987) cited Lazarus's definition of coping strategy indicating two major strategies. First, strategies may be used to change the stressful situation for the better, either by changing one's

own offending actions or by changing the threatening environment. Second, strategies may be used to manage the physiological and psychologic outcomes of stress-related emotions themselves.

Burckhardt (1987) concluded that health care professionals need to be aware of situations when a patient's usual strategies are no longer adequate for effective coping. Lazarus and Folkman (1984), and Antonovsky (1985) classified coping strategies into two categories: emotion-focused forms of coping and problem-focused forms of coping. Emotion-focused strategies are directed at regulating the emotional response to the problem such as avoidance, minimization, distancing, selective attention, and positive comparisons. Problem-focused strategies are directed at managing or altering the problem such as defining the problem, generating alternative solutions, weighting the alternatives in terms of their cost and benefits, and acting (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) have pointed out that in coping with a demand, people can focus on either a problem orientation or emotional regulation.

Billings and Moos (1981) divided coping strategies into three categories: 1) active-behavioral strategies; 2) active-cognitive strategies; 3) avoidance strategies. Active-behavioral coping refers to overt behavioral attempts to deal directly with the problem. Active-cognitive coping includes attempt to manage one's appraisal of the stressfulness of an event. Avoidance coping refers to attempts to avoid activity confronting the problem. Billings and Moos (1981)

found that more reliance on active attempts to deal with an event and fewer attempts to avoid dealing with it were associated with less stress.

Although there are many ways to classify coping responses, most approaches distinguish between strategies that are active in nature and oriented toward confronting the problem (Holahan & Moos, 1987), and strategies that make an effort to reduce tension by avoiding dealing with the problem. In this study, the researcher has been adopted Lazarus and Folkman's typology of coping processes that distinguishes between problem-focused and emotion-focused coping strategy.

Stress and Coping Strategy

Jalowiec and Powers (1981) compared the stressful life events and coping behavior in 25 emergency room patients with nonserious acute illnesses and 25 newly diagnosed hypertensive patients. Stress was evaluated with a Stressful Life Event (SLE) questionnaire and coping with the Jalowiec Coping Scale. Results from this study showed that emergency room patients reported significantly more ($p < .05$) SLEs for the one year preceding illness onset, although more hypertensives subjectively rated their stress level as high; emergency room patients experienced significantly more SLEs in personal and social, home and family, and financial categories. Jalowiec et al also found that each group placed more emphasis on solving the problem or handling the situation than relieving the distress accompanying a stressful situation. They rated problem-focused coping methods significantly higher in degree of use than emotion-focused strategies.

Another study examined the influence of uncertainty in illness and use of coping methods on emotional distress and recovery following myocardial infarction (Christman, McConnell, Pfeiffer, Webster, Schmitt, & Ries, 1988). Seventy patients who had a confirmed myocardial infarction were studied. The mean age for the 16 females and 54 males was 58 years. A longitudinal exploratory design with measures obtained at three times was used; multiple regression was used to analyze the data. Uncertainty was measured with the Mishel Uncertainty in Illness Scale; emotional distress was measured with the Profile of Mood States; and coping methods were measured with the Jalowiec Coping Scale. Results from this study showed that uncertainty explained a significant amount of the variance in emotional distress prior to hospital discharge (21%), and 1(16%) and 4 (26%) weeks after discharge; one week after discharge, coping behaviors significantly added to the variance explained in distress (27%); greater use of emotive coping behaviors was associated with higher levels of emotional distress and accounted for the majority of the variance explained by coping behaviors.

Scott (1983) studied relations among anxiety, critical thinking, and capacity to process information found important to coping response in 85 women, aged 18 to 60, who were experiencing breast biopsy. Participants were tested after hospital admission but before diagnostic results were known. Scott found extremely high state anxiety levels prior to biopsy and compromised reasoning ability at a critical time when demands on cognitive functioning were high. The patients with high anxiety, low critical thinking ability, and low capacity for information

processing may constitute a high risk group in need of special attention. Patients exhibited emotional disturbance post-operatively. Scott suggested major concerns of people following cancer diagnosis and determined that effectiveness of coping strategies and good follow-up support are important regarding the person's survival.

Coping Strategies in Specific Situations

Studies of coping strategies with specific situations such as treatment-related stressors and how individuals cope with such situations will be discussed. Three of these studies explored relationships among treatment-related stressors and coping strategies in dialysis patients.

Baldree, Murphy, and Powers (1982) studied the relationship between treatment-related stressors identified by 35 hemodialysis patients and coping strategies, and Gurklis and Menke (1988) replicated this study. Gurklis et al studied 68 hemodialysis patients using a Hemodialysis Stressor Scale and the Jalowiec Coping Scale. Results of this study showed that physiological stressors were more troublesome than psychological stressors ($t$= 10.85, $p$< .0001). Subjects used problem-focused coping more often than affective methods to handle stress ( $t$= 10.93, $p$< .0001) supporting the Baldtree et al (1982) findings.

Eichel (1986) examined the stress factors and coping strategies reported by 30 subjects on continuous ambulatory peritoneal dialysis (CAPD) and compared them to the Baldtree et al (1982) study. Eichel found that although the CAPD subjects had less stress and used fewer coping strategies, the sources of stress and many of the coping strategies used were similar for both group. Thus researchers found that dialysis

patients used problem-focused coping methods significantly more than emotion-focused methods. These patients may emphasize problem-focused strategies in response to perceived expectations by their health-care personnel.

Ziemer (1983) examined the effects of providing patients with selected types of information prior to surgery and the reported frequency of use of coping behaviors following surgery. Ziemer also examined the relationship of the reported frequency of coping behaviors and outcomes of surgery. A total of 111 patients were randomly assigned to three groups. One received procedure information; a second procedure and sensation information; and a third group, procedure and sensation information, plus information on selected coping strategies. Results showed no evidence that the type of information provided for patients prior to surgery increased the reported frequency of coping behaviors or that the reported frequency of coping behaviors was related to improved outcomes as evaluated by pain intensity, distress, or selected physical complications. Ziemer stated when the relationship between the Pain Intensity Scale and the Distress Scale was considered, a correlation coefficient of .37 was obtained ($p < .00$). The correlation coefficient between the Physical Coping Behavior Scale and the psychophysiologic Coping Behavior Scale was found .34, $p < .00$. These correlations suggested that the scales overlap and may be measuring another common underlying concept or that response bias may have existed (Ziemer, 1983).

## Coping Strategies of Hospitalized Patients

Coping strategies of hospitalized patients were measured using coping scales such as the Jalowiec Coping Scale (Jalowiec et al, 1981), the revised Ways of Coping checklist (Lazarus & Folkman, 1984), or interviewing (Webb & Wilson-Barnett, 1983). Coping has been studied in hypertensive patients and emergency room patients (Jalowiec & Powers, 1981), patients undergoing surgery (Hill, 1982; Ziemer, 1983; Geden, Beck, Hauge, & Pohlman, 1984), women after hysterectomy (Webb et al, 1983), men with genitourinary carcinoma (Scott, Oberst, & Bookbinder, 1984), patients undergoing coronary artery bypass grafting (King, 1985), patients with hypertension (Powers & Jalowiec, 1987), and renal transplant patients (Sutton & Murphy, 1987). The results of these studies indicate that individuals use a combination of coping strategies such as problem-focused and emotion-focused. The selection of coping strategy is part of the coping process. Lazarus and Folkman (1984) suggest that "a process-oriented measurement of coping must, (1) refer to specific thought, feelings, and acts rather than to what a person reports he or she might or would do; (2) be examined in a specific context; and (3) be studied in slices of time so that changes can be observed in what is thought, felt, and done as the requirements and appraisals of the encounter change" (p. 317).

## Summary

In conclusion, a review of the literature focused on a theory of stress and coping. According to Lazarus and Folkman (1984), the theory identifies two processes, cognitive appraisal and coping, as critical

mediators of stressful person-environment relations, and problem-focused and emotion-focused coping strategies affect patients' outcomes.

No research has been conducted evaluating Lazarus and Folkman's theory of stress and coping in patients with colostomy. However, it would seem likely, that the hospitalized patients whose coping strategies were measured in the studies by Jalowiec and others did experience stress during hospitalization. It would be important to describe the kind of stress experienced by colostomy patients, as well as coping strategies employed. Then, it may be that particular nursing interventions could be developed and tested which facilitate coping appropriate for the individual's resources and perceived threat.

## Conceptual Framework

The conceptual framework for this study is based on the coping theory as developed by Lazarus and Folkman (1984)(See Figure 1). The framework includes loss of body integrity and control, altered body function, physical alterations, and altered body image as stressors. These stressors would be threats to affected patients.

According to Lazarus and Folkman (1984), coping is a dynamic process in which the individual uses cognitive appraisal to cope with a stressful situation. Cognitive appraisal is a process through which the person evaluates whether a particular encounter with the environment is relevant to his/her well-being. Cognitive appraisal has two major forms; primary appraisal and secondary appraisal. The degree of stress a person experiences depends on how much of a stake he/she has in the

outcome of an encounter, which is determined by primary appraisal. Secondary appraisal is the extent to which the person senses that something can or cannot be done to alter the troubled person-environment relationship. Primary and secondary appraisal work simultaneously to shape the meaning of every situation encountered (Folkman, 1984; Folkman et al, 1986).

The processes of appraisal and coping are interrelated and factors influencing each may be common to both processes (Folkman & Lazarus, 1980, 1985). Coping refers to strategies for dealing with threats. Threat in the absence of adequate coping and counterharm (psychological, social and material) resources is associated with stress reactions which manifest themselves in negative health changes. An individual appraises a situation in order to evaluate demands, options, and constraints. According to Wrubel, Benner, and Lazarus (1981), appraisal is based on past experience, learning, and problem-solving skills and environmental resources, such as social and financial support. Acquired attitude and expectations exert an influence on the individual's perception of an events. If an event is perceived as undesirable or threatening, the person is confronted with demands from the internal and external environment to change and adapt. Perceived lack of cognitive appraisal by colostomy patients may delay coping with their colostomy, thereby increasing threats; promoting colostomy patients' appraisal through interventions may influences the coping strategies employed to deal with a stressful situation.

Coping has two recognized major functions: regulating stressful emotions (emotion-focused coping) and altering the troubled person-environment relation causing the distress (problem-focused coping) (Lazarus & Folkman, 1984). Both forms of coping were represented in over 98% of the stressful encounters reported by middle-aged men and women (Folkman & Lazarus, 1980) and in an average of 96% of the self-reports of how college students coped with a stressful examination (Folkman & Lazarus, 1985).

The outcome of an encounter refers to the person's judgment of the extent to which the encounter was resolved successfully. The overall judgment is based on the individual's values and goals, and his/her expectations concerning various aspects of the stressful encounter (Lazarus & Folkman, 1984). In this study, information about threats was obtained through an interview, and use of coping strategies was measured with the revised Jalowiec Coping Scale.

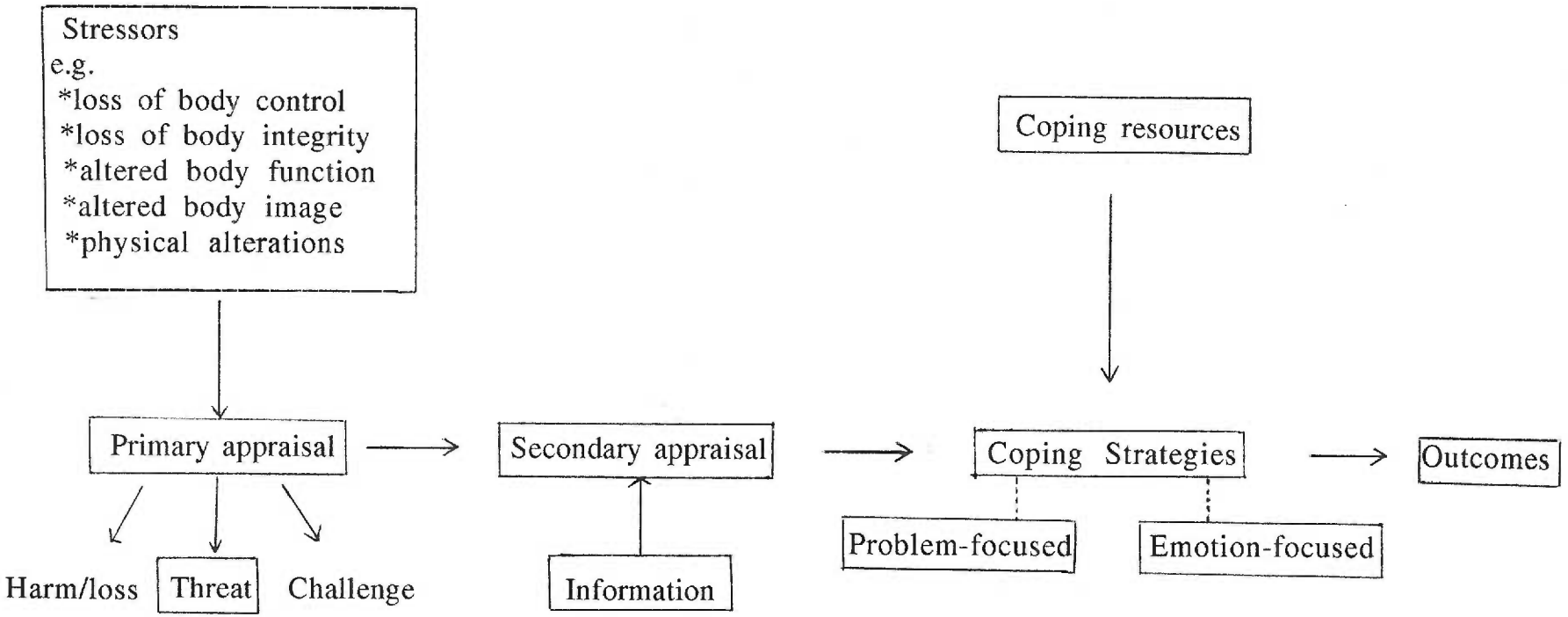


Figure 1. Conceptual Framework

Adapted from Lazarus & Folkman (1984)

## Research Question

The following research questions for this study were addressed: 1) What are the major threats perceived by post-operative hospitalized colostomy patients, and 2) What coping strategies do colostomy patients report using on the fifth to seventh day post-operatively?

# CHAPTER III

# METHODS

## Design

This study combined qualitative and quantitative methods, using a descriptive design, to examine the threats and coping strategies of colostomy patients on the fifth to seventh postoperative day. On the fifth to seventh postoperative day, the patient's physiologic status is generally stabilized, the patient becomes concerned with recovery from the surgery itself and begins to focus on the physical changes resulting from the surgery. The colostomy begins to function and the patient becomes aware of the care necessitated by the ostomy (Dudas, 1982). The nurse can teach patients before going home how to manage their own colostomy. In this postoperative phase, the patient becomes more alert and comfortable, he/she actually becomes curious and takes an interest in the ostomy care. Therefore, the fifth to seventh postoperative day was chosen as the appropriate time for data collection.

Tripp-Reimer (1985) indicated that qualitative studies tend to be exploratory in nature, providing rich descriptive and documentary information about the phenomenon. Quantitative methods are needed when the researcher wishes to know how much, how often, or to what extent a phenomenon is present. Tripp-Reimer (1985) suggested that "to

obtain a comprehensive understanding of a topic, qualitative and quantitative data sets should be combined" (p. 180).

The dependent variables for this study were coping strategy and self-reported threats. Other descriptive data were age, gender, education and occupational status, marital status, relationship with family and friends, and ostomy visitors. All of these demographic variables have been associated with differences in reaction to coping (Viney & Westbrook, 1982; Shipes, 1987). For example, in terms of age, Ganz, Schag, and Heinrich (1985) found that younger patients experienced more frequent or severe psychosocial and treatment-related problems than the older patients, and younger patients experienced more difficulty dealing with the health care setting. Several studies reported changes in social and sexual functioning after stoma formation, including refusal to leave home for visits, vacations, discontinuance of preoperatively significant social relationships, marital discord, withdrawal from intimacy, and failure to resume occupations (Eardley, George, & Davis, 1976; Fisher, 1979; Klopp, 1990). The presence/absence of ostomy visitors is also important; United Ostomy Association visitors serve as role models who have already lived through the adjustment process following ostomy surgery, and they are unique sources of support (Maklebust, 1985). These variables may affect coping with ostomy, and thus information was obtained by using a demographic data sheet.

Instruments

In order to obtain the information regarding patient appraisal of threats, postoperative colostomy patients were asked to describe their

appraisal of threats, using a semistructured interview. Interview questions are presented in Appendix A. The coping strategies of colostomy patients were obtained by using the revised Jalowiec Coping Scale (Jalowiec, 1989) (Appendix B). The revised Jalowiec Coping Scale was chosen for this study because it is useful for clinical practice, i.e., the questions are more clinically oriented than the Ways of Coping Scale (Lazarus & Folkman, 1984). For example, one clinically oriented question is "talked the problem over with a professional person (such as a doctor, nurse--)." Also from the literature review, most nursing studies used the Jalowiec Coping Scale rather than the Ways of Coping Scale; thus, use of the Jalowiec Coping Scale will allow the researcher to examine or compare results of the present study with the nursing literature.

The original Jalowiec Coping Scale was developed by Jalowiec and Powers (1981). Jalowiec and Powers (1981) examined stress and coping in hypertensive and emergency room patients. They focused on the stable facets of coping behavior. The Jalowiec Coping Scale is a likert-type scale with five-point response sets. The underlying conceptualization is that coping occurs as either problem-focused or emotion-focused. The scale addresses 40 coping methods based on each orientation. Reliability was determined by the test-retest method with a Spearman's rank order correlation of .79 ($p < .001$). Construct validity was established by factor analysis using SPSS (Jalowiec, Murphy, & Powers, 1984). Internal consistency reliability using Cronbach's alpha was computed on each of the four factors

(.86, .73, .75, .68). These alpha coefficients support each factor as a separate component of the construct.

The revised Jalowiec Coping Scale is a 60-item, 0 to 3 point rating scale, which assesses eight specific coping styles. Each item is rated separately as to use and as to effectiveness. Eight coping styles were described by Jalowiec: 1) Emotive coping style--- expressive emotions (5 items); 2) Evasive coping style--- evasive and avoidant activities (13 items); 3) Confrontive coping style--- constructive problem solving (10 items); 4) Fatalistic coping style--- pessimistic approach (4 items); 5) Optimistic coping style--- positive outlook (9 items); 6) Palliative coping style--- stress reducing methods (7 items); 7) Self-Reliant coping style--- self-initiated activities (7 items); 8) Supportant coping style---supportive system (5 items).

For this study, the researcher divided these eight coping strategies into two categories: a) problem-focused coping strategies such as confrontive, supportant, and self-reliant; b) emotion-focused strategies such as emotive, evasive, fatalistic, optimistic, and palliative. This is based on the original Jalowiec Coping Scale.

Validity of the revised Jalowiec Coping Scale is based on the original Jalowiec Coping Scale (Jalowiec et al, 1984). The Cronbach's alpha reliability of the revised Jalowiec Coping Scale (Jalowiec, 1989) ranges from .88 to .94 for the overall use score and .81 to .96 for the overall effectiveness score on cardiac transplant patients (N=35) over four time periods. The Cronbach's alphas for each of the eight coping subscales

were above .70 for both use and effectiveness. Three month and six month stability of use scores were supported.

Pilot Study

A pilot study is a small scale version, or trial run, done in preparation for a major study (Polit & Hungler, 1987). The revised Jalowiec Coping Scale has 60 items and would require time; however there were no studies that reported the ideal length of time for a patient to complete the revised scale.

The researcher conducted a pilot study using the revised Jalowiec Coping Scale. Three male patients were asked to fill out the questionnaire. The three patients were aged 44, 63, and 72. The time to complete the questionnaire ranged 10, 23, and 25 minutes (mean = 19.3; SD = 3.61).

Pilot study of the interview was also conducted for the same patients to test that it could be completed in a reasonable time and that the content of the questions was appropriate. In this interview there were seven questions in terms of the threats related to the colostomy. The average length of interview was 15 minutes. However, the types of illness varied and included esophageal cancer, lung mass, and acute leukemia. Therefore, it was difficult to determine the suitability of the contents of the interview. Although the illness differed between these patients and colostomy patients, interview questions.

Subjects

This study was conducted in two hospitals in Portland, Oregon. A convenience sample of eight postoperative colostomy patients was

obtained from Oregon Health Sciences University Hospital and Veterans Administration Medical Center. Inclusion criteria consisted of the following:

1. Male and female patients who have had first time colostomy surgery.
2. Between the ages of 20 to 75 years.
3. Able to speak and understand English.
4. Willing to participate in the research study.

Patients who were diagnosed as being in the terminal phases of illness and those participating in outside psychological therapy groups were excluded from the study.

The demographic characteristics of patients are provided in Table 1. The eight patients were aged 20 to 75 (mean = 58.9, SD = 19.7). Of the eight colostomy patients, five were males and three were females, seven were Caucasian and one was black. Seventy-five percent (n= 6) of the patients were retired from their jobs. All patients had a high school diploma as shown in Table 1.

Data Collection Methods

The data collecting process was divided into two parts: the interview and the administration of the questionnaire. A semi-structured interview was conducted while the colostomy patients were in their hospital rooms on the fifth to seventh postoperative day. Interview questions were asked as they appear in Appendix A. The average time spent with the patients was 15.6 minutes. Accuracy of the information was maintained by tape recording the interview. The patients' names were not tape recorded.

After the interview, the patients were asked to complete the demographic data form, provided in Appendix C, and the revised Jalowiec Coping Scale. The subjects addressed a specific concern when completing the Jalowiec Coping Scale which means that the biggest worry was filled in the blank space on the scale. The revised Jalowiec Coping Scale is divided into two parts: the Use Scales and the Effective Scales. The colostomy patients were asked both Use and Effective Scales. However, only the Use Scales were analyzed for this study because the purpose of this study was to identify the use of coping strategies of colostomy patients, and it is based on Lazarus and Folkman's theory.

Procedures

After the study was approved by the Institutional Review Boards, the researcher maintained regular contact with two Enterostomal Therapy nurses to identify colostomy patients who were five to seven days postoperative. Prior to data collection, informed consent was obtained. First, the Enterostomal Therapy nurse asked if the patients were willing to talk with the researcher. The researcher then approached the patients in their hospital rooms on the fifth to seventh postoperative day, and the purpose of the study was explained. The consent form was signed by the colostomy patients. The colostomy patients were informed of two data collection instruments used, the interview and the revised Jalowiec Coping Scale.

The interview was conducted by the researcher in a private room. Even if the patients were with other patients in the room, the nurse provided a private room for the interview. The patients' responses were

tape recorded at the time of interview. All tape recordings were destroyed after transcription.

Protection of Human Subjects

The data collection began after the study was approved by the Oregon Health Sciences University Committee on Human Research and the subcommittee on Human Studies at the Veterans Administration Medical Center. Participation of the patients was on a voluntary basis and they had a right to refuse to participate or to withdraw at any time.

There was no risk to the subjects who participated in the questionnaire administration and in the interview other than mild inconvenience or anxiety at being tape recorded. Several researchers reported that colostomy patients may experience feelings of depression, denial, hopelessness, or hostility associated with stoma creation (Gallagher, 1972; Gallagher, Breckenridge, Thompson, & Peterson, 1983; Shipes, 1987; Klopp, 1990). Three potential subjects showed psychological distress after surgery, and were not entered into the study. The researcher asked the Enterostomal Therapy nurse or primary nurse to assist or comfort these patients. Subjects did not necessarily benefit individually from the study; however a potential benefit of this study was learning their coping strategies with physical alteration. The confidentiality of the subjects was maintained by using a code number on the questionnaire and the tape recording.

Analysis of Data

Data analysis began after all interviews and administration of the questionnaire were completed. Demographic data were analyzed using

descriptive statistics. Scores from the revised Coping Scale were computed by the following:

1) Raw Use Score: added the subject's use ratings for all items within the scale.
2) Mean Use Score: divided the subject's raw use score by the total number of items.
3) Overall Raw Score: added the subject's raw use scores from all eight coping subscales.
4) Overall Mean Use Score: divided the score from overall raw use score by 60 (the total number of items on the scale).

Alpha reliabilities were calculated for each of the subscales. A paired t-test was computed to assess differences between problem-focused and emotion-focused coping strategies.

Interview data were coded and themes were derived by the following process:

1) transcribed interviews were read and descriptions for questions two through seven were high-lighted; 2) descriptions were then tabulated for each question; 3) initial codes were formed by the grouping for each question and; 4) final codes were derived by collapsing and re-defining the initial codes. Interview data were reviewed by a member of the thesis committee to validate categories.

# CHAPTER IV

## RESULTS

In this chapter, the results of the study are presented. First the demographic information of the subjects is described. The findings of the interview and scales are presented according to two research questions.

### Description of Subjects

Eight postoperative colostomy patients participated, five males (62.5%) and three females (37.5%). Most of the subjects were Caucasian (87.5%), and ages ranged from 20 to 75 (mean = 58.9; SD = 19.7; median = 68). Most were married (75%), and two subjects (25%) were divorced and widowed. They had all completed high school, with two subjects (25%) having two years of college education. The majority (62.5%) were having ostomy visitors. Six (75%) were retired, and two were working part time. All subjects were protestant. These data are listed in Table 1.

Five (62.5%) of the eight subjects were diagnosed with rectal cancer, with one metastatic rectal cancer. Two subjects were diagnosed with metastatic colon cancer, and one with chronic bowel obstruction of subject's megacolon (Table 2). Four subjects (50%) had Anterior-Posterior Resection with colostomy, three were colon resection with loop colostomy, and one had a diverting colostomy.

Table 1

Subjects' Demographics

| Characteristic | Number | % |
|---|---|---|
| Gender | | |
| Male | 5 | 62.5% |
| Female | 3 | 37.5% |
| Marital Status | | |
| Married | 6 | 75.0% |
| Divorced | 1 | 12.5% |
| Widowed | 1 | 12.5% |
| Education | | |
| High school graduate | 6 | 75.0% |
| College | 2 | 25.0% |
| Employment Status | | |
| Retired | 6 | 75.0% |
| Part time | 2 | 25.0% |
| Ostomy Visitors | | |
| Yes | 5 | 62.5% |
| No | 3 | 27.5% |
| Race | | |
| Black | 1 | 12.5% |
| Caucasian | 7 | 87.5% |

Table 2

Medical Diagnosis of the Subjects

| Diagnosis | Number | % |
|---|---|---|
| Colon Cancer | | |
| Primary | 0 | 0.0% |
| Metastatic | 2 | 25.0% |
| Rectal Cancer | | |
| Primary | 4 | 50.0% |
| Metastatic | 1 | 12.5% |
| Obstruction | 1 | 12.5% |

Interview Results

The interviews were conducted to obtain the answer to research question number one, "What are the major threats perceived by postoperative hospitalized colostomy patients?" The length of interview ranged from 7 to 20 minutes (mean = 15.7; SD = 5.3; median = 18.0). One of the subjects who had metastatic colon cancer had pain during the interview, so the researcher kept the interview brief. Subjects' responses from the semistructured interviews were figured under final codes and described in Table 3. Question number seven asked subjects to respond to the question, "Please tell me if you had to pick your biggest worry right now, what would it be?" This question was designed from the conceptual framework of threats. The responses fell into seven main categories of worries: (1) colostomy care; (2) social life; (3) body image; (4) loss of body control; (5) spouse expectancy; (6) pain; and (7) recurrence of cancer. Examples are "worry how to care for this?"; "I won't be able to meet the people;" "it just kind of shocks on my body;" "first bother me, loss of body control;" "my husband didn't know to have this;" "I have a lot of pain;" "biggest fear is cancer." Thus in giving responses, subjects picked up more than one from seven categories. Responses to question number seven are listed in Table 4. By far, the most frequently occuring threat was colostomy care. Subjects expressed concern about whether they would be able to learn to care for it. According to answers from question seven, there was obviously a difference between subjects who had primary colorectal cancer and those who had metastatic colorectal cancer. Most of the primary

Table 3

Responses to Question #3 and #4

| Code | Responses |
|---|---|
| Colostomy care | "Worry how to care for this"<br>"It makes it difficult to try"<br>"Worry about leakage"<br>"Dealing with clean, hygiene"<br>"Worry how long, how full I should let this get before change"<br>"Worry about waste"<br>"Afraid of making mistake" |
| Social life | "I won't be able to meet the people"<br>"Definitely want to protect"<br>"May be other people can smell"<br>"I don't need to go to group meeting"<br>"Fifty percent of my life will change"<br>"Travel would be the difficult"<br>"Jobs would be the most difficult thing"<br>"Probably I can't wear the clothes"<br>"I have to change my daily life" |
| Body image | "Feeling uncomfortable to have this"<br>"I feel frustrated"<br>"It just kind of shocks me on my body"<br>"Dealing with the image of the body"<br>"Something changing"<br>"Colostomy isn't very lady like" |
| Loss of body control | "First bother me, loss of body control"<br>"Don't want to leak any more"<br>"worry about what's going to happen" |

Table 3 (Cont.)

| Code | Responses |
|---|---|
| Spouse expectancy | "My husband didn't know that"<br>"I don't know what the outcome is going to be----"<br>"Less try and find the right partner" |
| Pain | "Pretty sore, feel very bad"<br>"I have a lot of pain" |
| Cancer | "Biggest fear is cancer"<br>"Worry about cancer"<br>"The cancer might still be somewhere in there" |

Table 4

Major concerns regarding colostomy identified by the colostomy patients

| Threat | Primary colorectal cancer (n=4) number of subjects identifying threat (%) | Metastatic cancer(n=3) number of subjects identifying threat (%) | Other (n=1) |
|---|---|---|---|
| Colostomy care | 3 (75%) | 2 (67%) | 0 |
| Social life | 3 (75%) | 0 | 0 |
| Body image | 1 (25%) | 1 (33%) | 1 (100%) |
| Loss of body control | 1 (25%) | 0 | 0 |
| Spouse expectancy | 1 (25%) | 1 (33%) | 1 (100%) |
| Cancer | 1 (25%) | 2 (67%) | 0 |
| Pain | 0 | 1 (33%) | 0 |

colorectal cancer subjects appraised the threats of colostomy as colostomy care and social activity. The threats of body image and spouse expectancy (includes sexuality) were related to subjects' self-image changes. In contrast, for subjects with metastatic colorectal cancer, the greatest threats were fear of recurrences of the cancer and pain.

Question number three, "Are you feeling worried about anything today?" and number four, "Has anything happened that you feel caused you to worry about _____ ?" were formulated to obtain more information about perceiving threats by colostomy patients. For these questions, the responses were "I kind of feel a little uncomfortable without it because it's big thing coming off the side of my stomach," "I just put this (colostomy) in my mind that this is the way it's going to be now." According to Lazarus and Folkman's theory (1984), the primary significance of threat is that it permits anticipatory coping. To the extent that a person can anticipate the future, he/she can plan for it and work through some of the difficulties in advance, as in anticipatory grief work. For the primary colorectal cancer, one subject mentioned fear of the cancer spreading. Two of the three metastatic colorectal cancer subjects also worried about changed body image and sexuality as mentioned by the primary cancer patients.

Summary of the Interview for Each Subject

Subject #1 (20y, Female)

Subject number one has had chronic obstruction of her megacolon for the past three years. From the interview, the researcher was impressed by her views regarding colostomy. She mentally accepted the colostomy

before the surgery because she was very sick before surgery with nausea, vomiting, and bowel obstruction. She wanted to have the colostomy so she could be relieved of the worry. For example, she says, "probably more relieved, because I always had to worry about the possibility of the obstruction, perforating the intestine, now I don't have to worry about it." She says essentially, "I can cope". Because of the colostomy, she must adjust to her changed body image and sexuality. She just got married. According her, her husband was very understanding about the colostomy. However, she is worried about how he is going to feel about her real stoma when she goes back home. For example, what he will think about her changed body appearance. Therefore, her biggest concern was her sexuality and changed body image.

Subject #2 (75y, Female)

Subject number two was diagnosed with adenocarcinoma of the colon and pelvic mass. She was severely sick for four weeks before surgery, and she knew that there was the possibility of the colostomy. Her biggest worry was her cancer. She says the secondary concern is colostomy care. However, colostomy concerns were overshadowed by concerns about the cancer. Overall, she is still coping with the cancer diagnosis.

Subject #3 (71y, Male)

Subject number three was diagnosed with colon cancer. He had a loop colostomy for bowel obstruction. When the researcher interviewed him, he had a high fever as a result of infection. He also was in pain.

Therefore, his present worry was pain. Colostomy concerns were his colostomy care.

Subject #4 (66y, Male)

Subject number four was diagnosed with rectal cancer. He had Anterior-Posterior Resection (A-PR) with colostomy. When the researcher interviewed him, he looked like he was accepting his colostomy. However, he had a lot of worry about the colostomy care. For example, "I'm afraid of making mistake in the care of colostomy." "Some new changes every day." "I should be getting more waste." Other threats he identified were his social activity and sexuality.

Subject #5 (56y, Male)

Subject number five had A-PR with colostomy for his rectal cancer. He was quite intelligent and calm. He said, "I didn't want to have the colostomy, however, I had to accept it." "Because this is a better way to live." He tried to accept his colostomy. His stresses were changed body image, loss of body control, and fear of recurrences of the cancer.

Subject #6 (70y, Male)

Subject number six had A-PR for his rectal cancer. He accepted the colostomy. For example, he said, "I feel that I am kind of fortunate." "I'll just go ahead and live as long as I can." He got plenty of information about his cancer and the colostomy before surgery. He was ready to have the colostomy. However, colostomy concerns were his colostomy care. Other threats he identified were social life.

Subject #7 (39y, Female)

Subject number seven was diagnosed with metastatic rectal cancer. She had had a radical hysterectomy for cervical cancer one year ago. After this surgery, she experienced severe constipation over the past few months. She had suffered before the surgery. Therefore, she had positive feelings about her colostomy. For example, she said, "I was miserable before the surgery." " I knew that I was going to have a colostomy." However, even though she knew she was going to have a colostomy before surgery, she is concerned about her changed body image and sexuality because her husband didn't know that she was going to have a colostomy. Other threats she identified were cancer. She says, "The tumor is probably about this far inside."

Subject #8 (74y, Male)

Subject number eight had A-PR for rectal cancer. He understood he was going to have a colostomy before surgery, and he got a lot of information in terms of his operation. His colostomy concerns were his social activities and colostomy care. He said it will be hard to perform actions due to colostomy pouch, smell, and odor. However, he said "Overall, I am coping with my colostomy."

Scores on Jalowiec Coping Scale

The results of this section are related to the research question number two, "What coping strategies do colostomy patients report using on the fifth to seventh postoperative day?" The revised Jalowiec Coping Scale was administered to eight postoperative colostomy patients to answer this research question. The 60 items on the scale are divided into eight

coping strategies. Subjects were asked to rate on a 4-point scale from 0 (never used) to 3 (often used). (A copy is included in Appendix B). The scales were scored by adding the rating for each of the eight coping strategies. The mean use scores for each coping strategy are presented in Table 5. The mean use scores were calculated by dividing each subject's raw use score by the total number of items. The range of possible mean use scores is 0-3. Table 6 shows the overall mean use scores for problem-focused coping strategies (confrontive, supportant, self-reliant) and emotion-focused coping strategies (emotive, evasive, fatalistic, optimistic, palliative).

Internal consistency reliability were computed by Cronbach's alpha. Alpha coefficients for each scale are shown in Table 7 and compared with present study and a sample of elderly widows/widowers (Herth, 1989). Alpha coefficients for total scales were compared with cardiac transplant patients (Jalowiec, 1989) and elderly widows/widower (Herth, 1989) (Table 8).

Table 5

Mean use scores for each coping style on revised Jalowiec Coping Scale

| Coping style | Mean use score (Raw/no of items) Range 0-3 | SD |
|---|---|---|
| Confrontive (10 items) | 1.91 | 0.18 |
| Evasive (13 items) | 1.02 | 0.45 |
| Optimistic (9 items) | 2.09 | 0.38 |
| Fatalistic (4 items) | 1.75 | 0.80 |
| Emotive (5 items) | 0.75 | 0.62 |
| Palliative (7 items) | 0.94 | 0.59 |
| Supportant (5 items) | 1.92 | 0.51 |
| Self-reliant (7 items) | 1.83 | 0.54 |

Table 6

Overall mean use score on revised Jalowiec Coping Scale

| Coping style | Overall mean use score | SD |
|---|---|---|
| Problem-focused | 1.90 | 0.25 |
| Confrontive | | |
| Supportant | | |
| Self-reliant | | |
| Emotion-focused | 1.30 | 0.34 |
| Evasive | | |
| Optimistic | | |
| Fatalistic | | |
| Emotive | | |
| Palliative | | |

* Paired t-test: -8.502; df = 7; p< .0001

Table 7

Alpha reliabilities for subscales of revised Jalowiec Coping Scale: Colostomy patients (present study) and elderly widows (Herth)

| Coping style | Present study | Herth |
|---|---|---|
| Confrontive | undefined | .96 |
| Evasive | .51 | .91 |
| Optimistic | .24 | .91 |
| Fatalistic | .67 | .74 |
| Emotive | .68 | .80 |
| Palliative | .59 | .03 |
| Supportant | .34 | .78 |
| Self-reliant | .59 | .51 |

Table 8

Alpha coefficients for total use score of revised Jalowiec Coping Scale: Colostomy patients (present study), elderly widows (Herth) and cardiac transplant patients (Jalowiec)

| | Present study | Herth | Jalowiec |
|---|---|---|---|
| Total use score | .80 | .64 | .88 |

Overall, a variety of types of strategies were used to cope with colostomy. Confrontive, optimistic, supportant, and self-reliant were the most frequently used strategies (See Table 5). It may be noted that most subjects confronted with or accepted their colostomy. For example, on the various coping strategies, item 16 (tried to keep the situation under the control), item 17 (prayed or put your trust in god), item 50 (tried to think positively), item 27 (tried to find out more about the problem), and item 29 (tried to handle things one step at a time) were most often used by subjects (See Table 9). It may be said that evasive, emotive, and palliative strategies were the least frequently used.

In examining the use of problem-focused versus emotion-focused coping strategies, the colostomy patients reported significantly higher scores on problem-focused strategies (mean = 1.90; SD = 0.245) than emotion-focused (mean = 1.30, SD = 0.334). The paired t-test was - 8.502 ($df = 7$, $p < .0001$). It is worthy of note that for every subject, the problem-focused mean use scores were greater than the emotion-focused mean use scores (See Table 10).

Table 9

Ten most frequently used coping strategies

| No | Item | Mean use score | SD |
|---|---|---|---|
| 16. | Tried to keep the situation under the control | 3.00 | 0.00 |
| 17. | Prayed or put your trust in God | 3.00 | 0.49 |
| 50. | Tried to think positively | 2.88 | 0.61 |
| 27. | Tried to find out more about the problem | 2.63 | 0.52 |
| 29. | Tried to handle things one step at a time | 2.63 | 0.74 |
| 9. | Prepared for the worst that could happen | 2.50 | 1.06 |
| 12. | Accepted the situation because very little could be done | 2.50 | 1.11 |
| 30. | Tried to keep your life as normal as possible and not let the problem interfere | 2.50 | 0.68 |
| 37. | Told yourself that you could handle anything no matter how hard | 2.50 | 0.89 |
| 39. | Tried to keep a sense of humor | 2.38 | 1.15 |

Table 10

Mean use scores for problem-focused and emotion-focused coping strategies for eight colostomy patients

| Subject number | Mean use scores for problem-focused | Mean use scores for emotion-focused | Overall mean use score |
|---|---|---|---|
| 1 | 1.59 | 1.13 | 1.30 |
| 2 | 1.91 | 1.21 | 1.46 |
| 3 | 2.09 | 1.71 | 1.85 |
| 4 | 1.86 | 1.26 | 1.48 |
| 5 | 1.86 | 1.00 | 1.31 |
| 6 | 1.64 | 1.21 | 1.36 |
| 7 | 2.36 | 1.92 | 2.08 |
| 8 | 1.86 | 1.00 | 1.32 |

# CHAPTER V

# DISCUSSION

In this chapter, the results of this study will be discussed in relation to the research question and the literature. The purpose of this study was twofold: 1) to identify the threats that confront colostomy patients, and 2) to identify the coping strategies they use. The results will be discussed including the demographic data, threats, and coping strategies of colostomy patients.

## Demographic Data

The eight subjects were almost similar in age, marital status, education, and religion. Eight subjects ages ranged from 20 to 75 with a mean of 58.9. Five subjects (63%) were aged over 56, and six were retired. Five subjects (63%) were diagnosed with rectal cancer. According to American Cancer Society (1988), in the United States, there were an estimated 42,000 new cases and 8,000 deaths from cancer of the rectum in 1988. In terms of gender, five subjects (63%) were men in this study. According to cancer statistics in 1989, in the new cancer incidence of colon and rectum (total = 151,000 cases), fifty-three percent of colon cancer patients are women and forty-seven percent are men. In contrast, fifty-two percent of rectum cancer are men and forty-eight percent of women (Cancer Institute's Surveillance, 1989). In the present study, one hundred percent of the primary rectul cancer patients were men, and the two colon cancer patients were a man and a woman. All

subjects mentioned that the support of family is very helpful in their ostomy surgery.

Threats

The interview was structured to obtain information regarding the threats. According to Lazarus and Folkman (1984), threat concerns harms or losses that are anticipated. When a harm/loss has occured, it is always fused with threat. Lazarus and Folkman also stated, "The primary adaptational significance of threat, as distinguished from harm/loss, is that it permits anticipatory coping" (p. 33).

Question number seven in the interview obtained information about threats of colostomy patients. As shown in Table 4, among subjects' number one worries, most of the subjects mentioned colostomy care.

When the researcher interviewed the subjects who were already under going self-care lessons, their worries were mostly on the definite and actual colostomy care. For example, they wanted to know when to change, when to empty the pouch, and how to do the peristomal skin care. Especially, seven days after the surgery, when patients are preparing to go home.

In fact many subjects reported great difficulty learning ostomy care. Ostomy patients stated that they did not want to think about ostomy care (Williamson, 1987). Hurny and Holland (1985) reported that prior to discharge and throughout the first 60 days at home, the ostomy patients focused almost exclusively on stoma management. When ostomy patients gain some mastery over care of the ostomy, they experience a sense of relief (Watson, 1986).

In contrast to the usual one week hospitalization for colostomy patients in the United States, in Japan the average length of hospitalization for colostomy patients is 4 to 6 weeks. The self-care lesson in Japan starts generally after 2 weeks of surgery. Therefore, if Japanese patients were interviewed one week after surgery, their responses would differ from those American colostomy patients. For example, some cases refuse to look at their own colostomy until they start the lessons. Japanese colostomy patients would give different responses.

The second most common worry of colostomy patients in this study was about their social life: traveling with friends, meetings, or other social activities. Their threats were namely the limits to their range of activities. For example, they expressed, "I won't be able to meet the people," "Fifty percent of my life will change." However, in other words, these kinds of concerns are constructive, meaning that they want to become a member of the society the same as before the surgery.

Dudas (1991) reported on a woman who had a colostomy for rectal cancer. After the surgery her colostomy and diagnosis of cancer were threatening to social activities outside the home. After all, the patient's values have changed from outside to in the house. Dudas suggests that some patients may feel awkward about relating their ostomy and cancer experiences to friends and coworkers. Therefore, nurses should assess how patients feel about their situations and their way of adjusting back in to a "normal life pattern."

The third most common worry was changed body image. For example, subjects said, "It just kind of shocks me on my body." "Dealing with the image of the body."

The concept of body image is an individual's concept of the shape, size, and appearance of his/her body and parts (Simos, 1979; Shapiro, 1984). Benner and Wrubel (1989) cited from Pennebaker, the body image as perception of the body, "the perceptual process required for the encoding of internal sensory information represents the same process that have traditionally been implicated in the perception of external environmental events" (p. 67).

Many studies showed that the presence of a stoma is usually interpreted by the person with the stoma as an undesirable change in bodily appearance and function. These changes may lead to changes in body image that influence certain aspects of life, such as social activities, work, and sexuality (Jackson, 1976; Williamson, 1987; Gawron, 1989; Klopp, 1990; & Cohen, 1991).

Klopp (1990) studied body image and self-concept among people who have colostomy, ileostomy, and urostomy. The results showed that colostomates have a poorer body image and self-concept than ileostomy and urostomy. Colostomy patients' reactions to fecal odor, leakages, and flatus were strong. In fact, in the present study, many subjects worried about fecal leakages, and flatus related to loss of body control. In addition, Klopp found that women were significantly more depressed than men.

On the other hand, how about the circumstances in Japan? Body image changes might be the number one concern for colostomy patients. For example, Sato (1988) reported the study regarding body image of Japanese colostomy patient as follows: A 60 year-old single female was diagnosed with rectal cancer, and underwent ostomy surgery. Before being hospitalized, she was in a good environment, both socially and economically. Moreover, she was well-known as an advisor on TV. These were her self-images. However, after the surgery, she didn't inform anyone of the fact. During the 4 weeks of hospitalization, she refused all visitors. Why did she react like this? Because she said, "I became very ugly." "I am miserable." "I can't tell anyone that I have a colostomy." It can be said that she was very much in shock about her self-image and body-image, which was totally changed and she was feeling the stigma after the surgery. However, eventually she accepted and coped with her colostomy. It took her more than a year to do that. In the Japanese culture, the social appearances are still considered more important than personal quality. This is related to the Japanese "shame culture." Among the Japanese, for a long time, it was a disgrace and social taboo to talk in public about "elimination" and "sex." Even now there is this tendency, especially, among the middle-aged people. Therefore, for the Japanese people, particularly for the colostomy patients, after the surgery, the changes in body-image and self-image are serious issues.

For colostomy patients, other important concerns are their sexuality. Two female subjects and one male subjects in the present study were

worried about spouse expectancy which means sexuality. For example, female subject said, "My husband didn't know about that (colostomy), I am so scared and wondering how he is going to feel about that---."

Sexuality is a necessary part of a person and behavior and thus is an essential component of a person's body image (Dudas, 1991). Groeckner (1991) reviewed research projects that explored sexual adjustment and sexual information for persons who have had ostomy surgery. According to Groeckner, one hundred percent of men with a colostomy and urinary diversion experienced impotence, either temporarily or permanently. There is a high incidence of impotence when a wide excision is done for treatment of rectal cancer or for bladder cancer.

The major sexual dysfunction in the women was dyspareunia. Seventy-six percent of female ostomy patients complained about discomfort or a tight feeling during intercourse after surgery (Groeckner, 1991). The causes are the formation of scar tissue that may create bands around the vagina and cause pain during penetration. Groeckner (1991) also mentioned about body image and sexual attractiveness. The majority of subjects said their initial reaction after surgery was one of shock and repulsion.

A patient's spouse/partner is also an important part of sexuality adjustment after surgery. Hurny and Holland (1985) reported that the spouse of an ostomy patient experiences even more distress and anxiety than the patient. For example, two months after discharge, while the

patient is coping well, the spouse's ability to cope effectively drops, the anxiety levels are high.

Those examples indicate that it is not only the patients who may need professional assistance to cope, but also the spouse may need assistance. Dudas (1991) pointed out that nurses should discuss sexual matters with patients and their partner. For example, the nurse might discuss about mobility limitations, positioning, changes in body image, and personal hygiene.

Other findings from the interview were relief and resignation. This was a surprising finding. In terms of relief, most subjects mentioned that they were relieved from pain and anxiety related to their cancer. For example, they said, "I don't have pain anymore." "Physically, I'm happy." "Emotionally, I feel more stable." "I feel that I'm kind of fortunate."

Pain causes the most problems related to cancer, and pain is associated with fear. If pain develops, it can be a terrible and potentially unmanageable problem. Dorrepaal, Aaronson, and Frits (1988) studied the nature, pattern, and consequences of pain experienced by cancer patients. Dorrepaal et al found that pain among cancer patients often has serious negative consequences for the daily lives of patients, significant reductions in activity levels, and sleep disorders. They also pointed out that psychological factors can play a significant role in the pain experience of patients. In the present study, most subjects appreciated that they were relieved from these problems which decreased the anxiety.

In terms of resignation, according to the dictionary, resignation means an accepting, unresisting attitude or state. The majority of subjects stated that they could handle the situations or could manage their own colostomies by themselves. For example, they said, "I can handle everything." "Keeping myself regulated." "I didn't want it, but I had to accept." "I'm never afraid of anything, if anything goes serious." "I can cope with my colostomy." These statements were very impressive to the researcher, and it seems they come from hardy persons.

Nagy and Nix (1989) studied the relationship between hardiness and preventive health behaviors of college students. Nagy et al found that one influence in the relation between preventive health behavior and hardiness may be that hardiness attributes encourage positive coping. The positive coping may reduce negative health behaviors.

Finally, forty percent of the subjects in the present study expressed fear of recurrences of cancer. Coe and Kluka (1990) reported similar findings. Coe et al studied the concerns of the patient and spouse in relation to ostomy surgery for treatment of cancer. They found that the main focus of subjects was on the disease such as fear of cancer spreading rather than the ostomy. Coe et al (1990) recommend that inclusion of data regarding prognosis is important to determine the potential correlation with disease-related concerns.

Lazarus (1966) stated that "observable threat and stress reactions are reflections or consequences of coping process intended to reduce threat" (p. 152). Lazarus further stated that "the extent to which a person feels

threatened is in part a function of his/her evaluation of coping resources---" (Lazarus & Folkman, 1984; p. 167).

Coping Strategies

The revised Jalowiec Coping Scale was used to determine what coping strategies colostomy patients use. The revised Jalowiec Coping Scale was designed to assesses stressor/stressful situation (Jalowiec, 1987). The 60 items on the scale are divided into eight coping strategies. The original Jalowiec Coping Scale consisted of two categories of coping strategies: problem-focused coping and emotion-focused coping strategies. However, the revised Jalowiec Coping Scale consists of eight coping styles. The researcher divided these eight coping strategies into the same two categories as the original Jalowiec Coping Scale; these were problem-focused (22 items) and emotion-focused coping strategies (38 items).

The data from this study indicate that postoperative colostomy patients use more problem-focused coping strategies than emotion- focused coping strategies on the scale (See Table 10). The problem-focused strategies supportant, confrontive, and self-reliant had high reported use. However, the most commonly used strategies were the optimistic coping strategies (Table 5) such as "hoped that things would get better," "tried to keep your life as normal as possible and not let the problem interfere," and "tried to keep a sense of humor." This result was related to the relief which represented the results of the interview. Most subjects mentioned that they were relieved from pain and anxiety after the surgery. According to Folkman and Lazarus (1980), emotion-focused strategies

might help the person to maintain hope and optimism, to refuse to acknowledge the worst. In other words, this kind of coping strategies is salient in promoting wellness-oriented coping (Herth, 1990). Moreover, optimistic appraisals can be made with hardiness (Pagana, 1990).

Alpha coefficients for each scale of the present study were computed by Cronbach's alpha and compared with widows/widowers (Herth, 1989) (See Table 7). Herth studied the relationship of hope, concurrent losses, coping style, and setting to grief resolution in the elderly widows/widowers using the revised Jalowiec Coping Scale. Comparing the Cronbach's alphas for each subscale, the alphas in the present study were one value of undefined with the other alphas ranging .24 to .68. For the Herth study, the Cronbach's alphas ranged .03 to .96.

The reliability of the subscales of the revised Jalowiec Coping Scale of the present study was generally below the Herth study (See Table 7). However, the result of alpha coefficients for total scales (.80) that compared with Herth (.64) were higher for the present study (See Table 8).

Jalowiec (1989) studied the quality of life in cardiac transplant patients (n = 35) obtained over four time periods. The Cronbach's alpha for each of the eight coping subscales, although Jalowiec did not report the individual values, were above .70 except for the fatalistic subscale. In the present study, the Cronbach's alphas for each subscale were lower than most of Jalowiec study. Comparing the overall alpha between Jalowiec and present study showed .88 for Jalowiec and .80 for present study (See Table 8).

Jalowiec (1989) stated there was good homogeneity reliability on revised Jalowiec Coping Scale between Jalowiec and Herth's studies. However, the homogeneity reliability of the present study can not be concluded because the subject numbers were too small.

In terms of coping strategies, Lazarus has elaborated the view point that an event can be stressful only if the individual perceives it (Pagana, 1990). According to the Lazarus' theory, an individual evaluates a stressful situation as a threat, challenge or harm-loss. A person feels threatened and the strategy employed in attempting to cope with the threat (Lazarus & Folkman, 1984).

According to Lazarus and Folkman (1984), emotion-focused coping and problem-focused coping differ in the facets of a stressful encounter over which they are used to gain control. Problem-focused coping is used to control the troubled person-environment relationship. Emotion-focused coping is used to control distressing emotion (Folkman, 1984).

Problem-focused coping is aimed at problem solving or doing something to alter the source of the stress. Problem-focused strategies related to meeting the task include selecting content areas to study, preparing, and allocating time for studying (Lazarus & Folkman, 1984). The findings of the present study support the usefulness of problem-focused coping strategies. The majority of subjects felt the problems regarding their colostomy were colostomy care, social activity, and changed body image. They want to know how to manage a colostomy or how to figure the social activity after the discharge. A theoretical understanding of the relationship between these threats and the revised

Jalowiec Coping Scale were obtained by some of the items within subscales. For example, subjects selected items, "tried to find out more about the problem," "tried to think positively," and "prepared for the worst that could happen."

Vitaliano, Maiuro, and Becker (1987) found that persons who use a problem-focused strategy will have less depression than those who do not use this strategy. This strategy is considered to be health promoting and adaptive. From the present study, it was also found that most subjects showed positive reaction and acceptance to the colostomy, and every subject used problem-focused coping strategies more than emotion-focused.

However, theory might predict use of different coping strategies in the metastatic cancer patients. For example, Hilton (1989) noted that threat of recurrence and sense of commitment play an important role for coping with a cancer diagnosis. However, different coping strategies were not observed between primary cancer and metastatic cancer subjects. This lack of difference was probably due to the instructions to focus on the colostomy when completing the coping scale.

Findings similar to the results of the present study were reported by several coping studies in samples of renal transplant patients (Sutton & Murphy, 1989); hemodialysis patients (Baldree, Murphy, 1989); and hypertensive and emergency room patients (Jalowiec & Powers, 1981). For example, Sutton and Murphy (1989) studied coping patterns in forty renal transplant patients. The coping strategies were assessed by the original Jalowiec Coping Scale. They reported that problem-focused

coping scores were significantly higher than emotion-focused, ($t = -10.10$; $df = 39$; $p < .001$). In the present study this difference was also significant ($t = -8.502$; $df = 7$; $p < .0001$). Murphy et al noted that the most frequently used coping methods were to try to look at the problem objectively and see all sides, and try to maintain some control over the situation. These strategies were similar to the present study. For example, most frequently used strategies were "tried to keep the situation under the control," "prayed or put your trust in God," and "tried to think positively (See Table 9).

Michell and Kampfe (1990) studied the coping strategies and perceptions of 24 graduate students in occupational therapy who were participating in fieldwork experience and found that most students used the problem-focused strategies. Michell et al noted that most of the occupational therapy students perceived the fieldwork experience as important, controllable, and stressful, but not disruptive to their lives. Lazarus and Folkman (1984) stated that problem-focused forms of coping increased in situations appraised as changeable.

Other important findings were in giving information to the patients and families. Most subjects mentioned the importance of the information. For example, subjects said, "I got a lot of information from the doctor/nurse before surgery," and "I was not worried to have a colostomy, because I received the information in terms of colostomy care from the ostomy visitor."

Cohen (1991) stressed that "it is important to provide the information to the patients and family before surgery about the anatomical and

physiological changes to take the place and to mark the stoma site" (p. 70). As stated earlier (Chapter IV) in this study, for the colostomy patients, their biggest worry was colostomy care. They worried about technical skills for management of the colostomy such as applying the pouch, preventing the leakage, and skin care of the surrounding the stoma.

Elcoat (1989) mentioned that stoma patients need information regarding stoma management skills and emotional support. The United Ostomy Association (UOA) provides visitors who help the patients in many aspects of their life after surgery (Salamy, 1991). For example, ostomy visitors who have already lived through the coping process following ostomy surgery serve as role model.

Maklebust (1985) computed the rate of occurence of UOA visits. Forty-three percent of the subjects had UOA visits, and the majority of visits (75%) took place postoperatively. In the present study, sixty-three percent of subjects had ostomy visitors. They mentioned that, "I got a lot of information from the visitor, so I wasn't scared of colostomy." Thus, the United Ostomy Association's visitors play an important part in giving information.

Lazarus and Folkman (1984) emphasized the importance of providing information. Lazarus et al were concerned with the mechanisms through which information influences appraisal. Moreover, Lazarus et al (1986) stated that despite the increased attention that has been given to coping process, there remains a lack of information about the variables that influence them.

Finally, there are many factors related to a person's coping strategies such as age (Folkman, Lazarus, Pimley & Novacek, 1989; Thomas, Turner & Madden, 1988; McCrae, 1989); gender (Folkman & Lazarus, 1980; Hamilton & Fagot, 1988); personality (Nowack, 1989; Pagana, 1990); culture (Lassiter, 1987; McInerney, 1988), and social support (McNett, 1987). In the present study, the number of subjects was small, therefore, the relationship between these factors and coping strategies of colostomy patients was not examined. However, further study needs to be done to explore the relationship between these patient factors and coping strategies of colostomy patients.

# CHAPTER VI

## SUMMARY

This chapter presents a summary of the results of this study. Research methods are evaluated with limitations, implications for nursing practice and significance, and recommendations for further research will be discussed.

### Research Summary

Coping is usually defined as efforts to master stressors when a routine or automatic response is not readily available (Burckhardt, 1987). Lazarus and Folkman (1984) defined coping: "Coping is the process through which the individual manages the demands of the person-environment relationship that are appraised as stressful and the emotions they generate" (p. 19). Many research studies have been conducted in relation to coping, and attention has been given to defining the concept. The purpose of this study was to identify the threats that confront ostomy patients and to identify the coping strategies they use.

Review of the literature provides varying coping strategies. However, literature addressing coping strategies in ostomy patients is extremely limited in comparison to other medical-surgical illnesses. The conceptual framework for this study was adapted from Lazarus and Folkman (1984). According to the theory, the extent to which a person feels threatened and the strategy employed in attempting to cope with the

threat are in part a function of the evaluations relating to availability and effectiveness of coping resources. The degree of threat influences the extent to which available resources can be used for coping.

The research questions were: 1) what are the major threats perceived by post-operative hospitalized colostomy patients? and 2) what coping strategies do colostomy patients report using on the fifth to seventh post-operative day?

A descriptive study design was chosen in order to allow for collecting data regarding subjects' descriptions of threats and coping strategies they use. The population targeted for the study was eight post-operative colostomy patients, five males and three females. Their ages ranged from 20 to 75 (mean = 58.9; SD =19.7; median = 68). Five of the eight subjects were diagnosed with rectal cancer, one with metastatic rectal cancer. Two subjects were diagnosed with metastatic colon cancer, and one with chronic bowel obstruction of the megacolon. Subjects were selected by a convenience sampling method. Inclusion criteria consisted of: 1) male and female patients who have had first time colostomy surgery; 2) between the ages of 20 to 75 years; 3) able to speak and understand English; and 4) willing to participate in the research study. Exclusion criteria were patients who were diagnosed as being in the terminal phases of illness and those participating in outside psychological therapy groups. Data were collected in two parts: the interview and the revised Jalowiec Coping Scale. Patient demographic data were recorded at the onset of the interview, and demographic data

and coping scale were analyzed using descriptive statistics. Transcribed interviews were analyzed for major categories of perceived threats.

From this study it can be concluded that post-operative colostomy patients' perceived threats were colostomy care, changed body image, and social activities. In addition, approximately forty percent of the subjects in this study expressed worry about the cancer diagnosis. Most colostomy surgery was performed because of cancer diagnosis such as colon and rectal cancer (4 subjects), and metastatic colorectal cancer (3 subjects) from other organs. It was similar to other studies regarding ostomy surgery. Coping strategies colostomy patients used were more problem-focused coping strategies than emotion-focused coping strategies on the revised Jalowiec Coping Scale. For example, subjects chose item number 16, "tried to keep the situation under the control," item number 27, "tried to find out more about the problem." All of the subjects reported using more problem-focused strategies than emotion-focused coping strategies. A paired t-test between these two types of coping strategies showed a significant difference ($t = -8.502$; $df = 7$; $p < .0001$).

Limitations

The present study has several limitations. First, the sample was small in size; therefore, the sample may not be representative of post-operative colostomy patients. The small number does not allow the results to be generalized to other colostomy patients. Moreover, because of the small number of subjects, investigation of the relationship among variables is limited. It is considered only exploratory in nature.

A second limitation was sampling criteria. This study focused on colostomy patients during their fifth to seventh day post-operative. In other words, the researcher focused on hospitalized colostomy patients. Therefore, the results of this study may not be generalized to discharged colostomy patients.

The third limitation was the revised Jalowiec Coping Scale, because this scale was a newly developed coping scale. There is no research study using the revised Jalowiec Coping Scale other than Jalowiec (1989) and Herth (1990). Therefore, the results of this study were not comparable with other published literature.

The final limitation was language. The interview was performed in English. However the researcher's speaking skill was limited to translate into English from Japanese. Therefore, the researcher tried to reduce this kind of limitation. The subjects' responses were tape recorded at the time of interview, and were transcribed by an English-speaking transcriber. The coding after transcribing the tape recordings was checked by an English-speaking professor.

Implications and Significance for Nursing Practice

This study is based on the coping strategies theory. According to Lazarus & Folkman (1984), problem-focused coping strategies tend to predominate when people feel that something constructive can be done, whereas emotion-focused coping tends to predominate when people feel that the stressor is something that must be endured. One of the reasons this study was done in the United States was to compare the coping strategies between American and Japanese colostomy patients.

According to the researcher's experiences, some Japanese colostomy patients might have a tendency to choose emotion-focused coping strategies. In other words, Japanese colostomy patients might have a tendency to take a different coping pattern. Many factors may influence the Japanese patients. For example, a moral, ethical problem is involved in the health care service system: whether or not to identify cancer to the patients, how and how many details should be explained to the patients; how far the patient can take part in her/his therapy. There are still many of this kind of problem. Thus, the national traits, culture, ethics, and the health care service system may affect the patient's coping strategies. However, further study is needed to be done for Japanese colostomy patients.

The results of this study add to the knowledge of the concept of coping strategies. This study is the first study to measure coping strategies in ostomy patients. The study described the perceived threats by colostomy patients and the coping strategies used by colostomy patients. Findings from this study would be helpful in understanding the coping strategies, and in assessing planning the format for ongoing support. The nurse may feel that the ostomy patient has fully adjusted to the changes in his or her physical self.

Findings of this study strongly suggested that the most significant role of the nurse is providing appropriate information to the patients and families. For example, preoperative information might be helpful in understanding the colostomy and in clarifying body image. A nurse might teach the patient how to manage a colostomy. In elderly colostomy

patients, special considerations, such as manual dexterity, and visual activity must be considered. All these factors affect how patients manage their ostomy (Dudas, 1991). It is also important to establish educational programs for both patients and nurses. Moreover, if the patients tend to choose emotion-focused coping strategies, counseling and emotional support should be integrated into the nursing care of the ostomy patients and family to help the patients and family cope with the changed body image.

Implications for Further Research

From this study, other research can begin to explore how ostomy patients cope with an ostomy. According to Lazarus and Folkman (1984) theory, further study is needed with larger number to explore how the person factors, such as personality and commitments, interact with factors in the situation, and with environment factors. Hurny and Bernhard (1989) stated that the result of the coping process is usually considered in terms of the patient's level of adaptation to the events. The level of adaptation is a main determinant of the patient's physical, psychological, and social well-being.

Lazarus and Folkman (1984) also defined coping as "constantly changing." A longitudinal study is needed to grasp the coping over time and to evaluate the outcomes of coping of colostomy patients.
For example, to understand the factors contributing to the individual's appraisal of the situation and to assess the ostomy patient's coping over time.

It is important to assess the coping strategies and what is perceived as the threat by ostomy patients. Also, differences in perception of threats and coping strategies between primary cancer ostomy patients and metastatic cancer ostomy patients need to be examined. The goal of nurses is to assess the patient's need, to provide resources, and to assist patients in coping with ostomy.

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Appendix A

Interview Questions

1. How are you feeling today?

2. What is different about how you feel today, compared to how you felt prior to surgery and after surgery?

3. Are you feeling worried about any thing?

4. Has anything happened that you feel caused you to worry about _____ , or increased your worry about_____?

5. Has anything happened that helped relieve your worry?

6. Have you done anything to help alleviate your worry/concern that___?

(cont. )

7. Please tell me if you had pick your biggest worry right now, what would it be? For example:

   a. loss of body control
   b. loss of body integrity
   c. altered body function
   d. changed body image
   e. colostomy care
   f. sexuality
   g. social life (e.g. job, social activity, recreational activity etc)
   h. family
   i. others _____

Probe Questions

1. Sometimes people who have had a colostomy worry about _____, have you felt this concern?
2. Is there anything else?
3. Give me a specific example?

Appendix B

Revised Jalowiec Coping Scale

Study # ____

# JALOWIEC COPING SCALE

*This questionnaire is about how you cope with stress and tension, and how you handle stressful situations.
In particular, I am interested in how you have coped with the Stress of ostomy : e.g. loss of body integrity, loss of body control, altered body function, altered body image, sexual activity, colostomy care, odor, skin irritation, travel, sports.
*Listed on this questionnaire are many different ways of coping with stress. For each coping strategy, two questions are asked:

Part A: How often you have used that particular strategy to cope with the stress listed above;
Part B: If you have used that strategy, how helpful it has been in coping with that stress.

## INSTRUCTIONS

### PART A

For each coping strategy listed, circle a number from 0 - 3 in Part A to show how often you have used that strategy to cope with the stress listed above. The coding for the numbers in Part A is as follows:

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

### PART B

For each coping strategy that you have used, circle a number from 0 - 3 in Part B to show how helpful that strategy has been in coping with the stress listed above. The coding for the numbers in Part B is as follows:

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

| COPING STRATEGIES | Part A How often have you used each strategy? | | | | Part B How helpful has the strategy been? | | | |
|---|---|---|---|---|---|---|---|---|
| | 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 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. Prepared for 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, counsellor) | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 |

| COPING STRATEGIES | Part A<br>How often have you used each strategy? | | | | Part B<br>How helpful has the strategy been? | | | |
|---|---|---|---|---|---|---|---|---|
| | Never Used | Seldom Used | Sometimes Used | Often Used | Not Helpful | Slightly Helpful | Fairly Helpful | Very Helpful |
| 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 |
| 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 |

| COPING STRATEGIES | Part A<br>How often have you used each strategy? | | | | Part B<br>How helpful has the strategy been? | | | |
|---|---|---|---|---|---|---|---|---|
| | Never Used | Seldom Used | Sometimes Used | Often Used | Not Helpful | Slightly Helpful | Fairly Helpful | Very Helpful |
| 32. Told yourself not to worry because everything would probably 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. Had a drink | 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 specific 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 people 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 and work harder | 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 | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 |
| 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 |

| COPING STRATEGIES | Part A<br>How often have you used each strategy? | | | | Part B<br>How helpful has the strategy been? | | | |
|---|---|---|---|---|---|---|---|---|
| | Never Used | Seldom Used | Sometimes Used | Often Used | Not Helpful | Slightly Helpful | Fairly Helpful | Very Helpful |
| 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 | 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 | 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 <u>any other</u> things you did to handle the stress mentioned at the beginning, that are not on this list, please write those coping strategies in the spaces below. Then circle how often you have used each strategy, and how helpful each strategy 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 |

Appendix C

Patient Information Form

Please complete the following:

1. Age _____
2. Sex _____
3. Marital Status (Please check the appropriate choice)
    1) Married __
    2) Divorced __
    3) Widowed __
    4) Separated __
    5) Single (Never married) __
4. Education background (Please check the appropriate choice)
    1) Some high school __
    2) High school graduate __
    3) College __
    4) Post graduate __
    5) Highest degree attained __
    6) Other _____
5. Employment Status (Please check the appropriate choice)
    1) Full time __
    2) Part time __
    3) Disabled __
    4) Retired __
    5) Unemployed __

Current or prior occupation _____

(cont. )

6. Religion (Please check the appropriate choice)

   1) Protestant __

   2) Catholic __

   3) Jewish __

   4) Other _____

7. Is your family supportive in your ostomy surgery?

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Not at all | A little | A fair amount | Much | Very much |

8. Are your friends supportive in your ostomy surgery?

| 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Not at all | A little | A fair amount | Much | Very much |

9. Ostomy visitors (Please check one)

   Yes __

   No __

10. Race (Please check the appropriate choice)

   Asian __

   Black __

   Caucasian __

   Mexican-American __

   Native-American __

   Other _____

Appendix D

Informed Consent

THE OREGON HEALTH SCIENCES UNIVERSITY

Consent Form

TITLE OF STUDY: Coping Strategies of Colostomy Patients

PRINCIPAL INVESTIGATOR: Ekiko Sato, R.N., (503)226-6654.

PURPOSE: It is estimated that 100,000 ostomy operations are performed annually in the United States. However health professionals know little about the problems of ostomy patients, especially the ways in which patients cope with an ostomy. The purpose of this study is to identify the threats and coping strategies in colostomy patients. Ms. Sato believes that this study will help nurses understand what types of coping strategies patients. Ms. Sato also believes this study will provide nurses with specific information that will be useful to individuals coping with an ostomy. You are being asked to participate in this study because you have had colostomy surgery within the past week.

PROCEDURES: If you choose to participate in the study, you will be interviewed for 20 to 30 minutes regarding your concerns about your colostomy. The interview will be tape recorded to maintain the information accuracy. Your name will not be tape recorded. After the interview, you will be asked to complete a coping questionnaire, which will take about 15 minutes.

RISKS AND DISCOMFORTS: The potential risk of participation in this study is mild inconvenience or anxiety at being tape recorded. You are free to refuse to answer any question that you do not wish to answer.

BENEFITS: Participating in this study will not necessarily be of direct benefit to you; however, the results of this study may benefit other ostomy patients in the future.

CONFIDENTIALITY: Neither your name nor your identity will be used for publication or publicity purposes. All your information will be maintained by using a code number rather than by your name. The tape recordings will be destroyed after data analysis.

COST: No research costs will be charged to you.

LIABILITY: The Oregon Health Sciences University, as an agency of the state, is covered by the State Liability Fund. If you suffer any injury from the research project, compensation would be available to you only if you establish that the injury occured through the fault of the University, its officers or employees. If you have further questions, please call Dr. Michael Baird at (503)494-8014.

OTHER: Ms. Sato has offered to answer any questions that you might have about the study. You may reach Ms. Sato at (503)226-6654.

Your participation in this research study is voluntary. You may refuse to participate, or you may withdraw from this study at any time without affecting your relationship with or treatment at the Oregon Health Sciences University.

You will receive a copy of this consent form.

Your signature below indicates that you have read the foregoing, or had it read to you, and agree to participate in this study.

_____ _____

Subject Date

_____ _____

Witness Date

_____ _____

Investigator Date

Department of Veterans Affairs

# VA RESEARCH CONSENT FORM

**Subject Name:** _____ **Date** _____

**Title of Study:** Coping Strategies of Colostomy Patients

**Principal Investigator:** Ekiko Sato, R.N. , BS. **VAMC:** Portland

## DESCRIPTION OF RESEARCH BY INVESTIGATOR

PURPOSE: It is estimated that 100,000 ostomy operations are performed annually in the United States. However health professionals know little about the problems of ostomy patients, especially the ways in which patients cope with an ostomy. The purpose of this study is to identify the threats and coping strategies in colostomy patients. Ms. Sato believes that this study will help nurses understand what types of coping strategies are used by patients. Ms. Sato also believes this study will provide nurses with specific information that will be useful to individuals coping with an ostomy. You are being asked to participate in this study because you have had colostomy surgery within the past week.

PROCEDURES: If you choose to participate in the study, you will be interviewed for 20 to 30 minutes regarding your concerns about your colostomy. The interview will be tape recorded to maintain the information accuracy. Your name will not be tape recorded. After the interview, you will be asked to complete a coping questionnaire, which will take about 15 minutes.

RISKS : The potential risk of participation in this study is mild inconvenience or anxiety at being tape recorded. You are free to refuse to answer any question that you do not wish to answer.

BENEFITS: Participating in this study will not necessarily be of direct benefit to you; however, the results of this study may benefit other ostomy patients in the future.

SUBJECT'S IDENTIFCATION (I.D. plate or give name-last, first, middle)

Department of Veterans Affairs

**VA RESEARCH CONSENT FORM**
(Continuation Page 2 of 3)

**Subject Name:** _____ **Date** _____

**Title of Study:** Coping Strategies of Colostomy Patients

**Principal Investigator:** Ekiko Sato, R.N., BS. **VAMC:** Portland

COST: No research costs will be charged to you.

LIABILITY: Every reasonable effort to prevent any injury that could result from this study will be taken. In the event of physical injuries resulting from the study, medical care and treatment will be available at this institution. For eligible veterans, compensation damages may be payable under 38 USC 251 or, in some circumstances, under the Federal Tort Claims Act. For non-eligible veterans and non-veterans, compensation would be limited to situations where negligence occurred and would be controlled by the provisions of the Federal Tort Claims Act. For clarification of these laws, contact District Counsel at (503) 326-2441. You have not waived any legal rights or released the hospital or its agents from liability for negligence by signing this form.

OTHER: Ms. Sato has offered to answer any questions that you might have about the study. You may reach Ms. Sato at (503)226-6654.

Your participation in this research study is voluntary, and you may withdraw from this study at any time without prejudice to yourself or to any future medical care with this institution or with the Department of Veterans Affairs (VA).

Neither your name nor your identity will be used for publication or publicity purposes. The results of your participation in this study may be used for publication or for scientific purposes, but your identity will not be disclosed unless you give separate, specific consent to this, or unless as required by law. Your records will be identified by a code number rather than by your name.

You will receive a copy of this consent form.

Your signature below indicates that you have read the foregoing, or had it read to you, and agree to participate in this study.

| | |
|---|---|
| _____ | _____ |
| Subject | Date |
| _____ | _____ |
| Witness | Date |
| _____ | _____ |
| Investigator | Date |

Department of Veterans Affairs

## VA RESEARCH CONSENT FORM

(Continuation Page 3 of 3)

**Subject Name:** _____ **Date** _____

**Title of Study:** Coping Strategies of Colostomy Patients

**Principal Investigator:** Ekiko Sato, R.N., BS. **VAMC:** Portland

RESEARCH SUBJECTS' RIGHTS: I have read or have had read to me all of the above. Dr. _____ has explained the study to me and answered all of my questions. I have been told of the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw from this study at any time without penalty or loss of VA or other benefits to which I am entitled.

The results of this study may be published, but my records will not be revealed unless required by law.

In case there are medical problems or questions, I have been told I can call ~~Dr.~~ Ms. Sato at 226-6654 during the day and ~~Dr.~~ Ms. Sato at 226-6654 after hours. If any medical problems occur in connection with this study the VA will provide emergency care.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I will receive a signed copy of this consent form.

_____ _____

Subject's Signature Date

_____ _____

Signature of Subject's Representative* Subject's Representatives

_____ _____

Signature of Witness Witness (print)

_____

Signature of Investigator

*Only required if subject not competent.

IF MORE THAN ONE PAGE IS USED, EACH PAGE (VAF 10-1086A) MUST BE CONSECUTIVELY NUMBERED AND SIGNED.

FORM 1990 10-1086

ABSTRACT

TITLE: Coping Strategies of Colostomy Patients

Author: Ekiko Sato

Approved:

[redacted]

Linda Felver, Ph.D., R.N., Research Advisor

Approximately 100,000 ostomy operations are performed annually in the United States. However, health professionals know little about the problems of ostomy patients, especially the ways in which patients cope with an ostomy. For example, the literature over the years has reflected concern for the physical complications of ostomy surgery, however, no nursing studies were found which dealt with coping strategies of ostomy patients. The objective of this study was to identify the coping strategies of colostomy patients.

A descriptive design was used that combined qualitative and quantitative methods to examine the coping strategies of colostomy patients on the fifth to seventh postoperative day. The conceptual framework used was based on Lazarus and Folkman's (1984) theory of stress and coping.

A convenience sample of eight colostomy patients, five males and three females was used. Their ages ranged from 20 to 75 (mean = 58.9; SD = 19.7; median = 68). Data were collected during two parts: the interview and completion of the revised Jalowiec Coping Scale.

Patient demographic data were recorded at the onset of the interview.

The findings indicated that post-operative colostomy patients' perceived threats were colostomy care, changed body image, and social activities. Coping strategies colostomy patients used were more problem-focused strategies on the revised Jalowiec Coping Scale. All of the subjects reported using more problem-focused strategies than emotion-focused coping strategies. A paired t-test between these two types of coping strategies showed a significant difference ($t = -8.502$; $df = 7$; $p < .0001$).

However, the generalizability of this study to other colostomy patients is limited because of the small sample size. It is recommended that further research be conducted on this topic.

Findings of this study suggested that the most significant role of the nurse is providing appropriate information to the patients and family. For example, preoperative information might be helpful in understanding the colostomy and in clarifying body image. Postoperative teaching to the patients and their families also is important to understand how to manage the ostomy. Because many of the subjects has claimed difficulty learning ostomy care. The nurse should establish educational programs for both patients and families, and nurses.