CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Literature related to gynecologic cancers, and stress and coping including concept of coping, measurement of coping, coping of patients with cancer and coping among different age groups are reviewed and presented. The conceptual framework is also presented in this chapter.

Gynecologic Cancers

Gynecologic cancers include cancers of cervix, ovary, uterus, endometrium, vagina, and vulva (Belcher,1992; Groenwals, Frogge, Goodman, & Yarbro, 1992; Lichtman, & Papera, 1990). The incidence of gynecologic cancers has been increasing in the world. These cancers account for 15% of all cancer diagnoses in women (Belcher, 1992). Gynecologic cancers are linked to life-style habits such as smoking, obesity, sexually transmitted diseases, early age at the time of initial intercourse and chronic diseases (Baird, 1988; Belcher, 1992). On the positive side, the survival rate for these cancers is also increasing because of the early detection and innovative treatment (Belcher, 1992; Otto,1991). According to the different types of cancer, the peaks of

incidences are in the different developmental stages of women. Cervical cancer has high incidence between 40 to 49 years old. For the ovarian cancer, the peaks of incidences range from young to elder depending on types of the ovarian cancer (Ling, 1982). The 5-year survival rate of the gynecologic cancer depends on the type of the cancers and the stage of tumors (Belcher, 1992).

Advanced treatment for gynecologic cancers include surgery, chemotherapy and radiation or combined treatment. Surgery is used for diagnosis and staging in the majority of gynecologic cancers and is the primary treatment for endometrial and invasive cervical and vulva cancers. Chemotherapy used for gynecologic cancers may be treated with a single or multidrug protocol as well as combination of chemotherapy and radiotherapy, and/or surgery. Depending on the cell type, tumor site, size and stage, radiotherapy may be provided preoperatively, postoperatively, and/or in conjunction with chemotherapy. Because of surgical risk, side effects of chemotherapy and radiotherapy, the patients may have physical impact such as nausea, vomiting, bleeding, anorexia, infection, fatigue, and sexual dysfunction (Belcher, 1992). The psychosocial impact such as chronic worry, anxiety, poor self-esteem, anticipatory grieving, altered role performance, altered family process and body image disturbance

could eventually threaten their emotional well-being (Gale & Charette, 1995; Lilley, 1987; Otto, 1991)). In gynecologic cancer patients, the guilt and shame are frequent emotional responses (Charles, Frank & Barbar, 1995).

Krouse & Krouse, (1982) reported that the depression scores of the gynecologic cancer patients were significantly higher than the scores of either mastectomy or biopsy patients. The scores of the gynecologic cancer patients increased significantly from pre- to post-treatment and remained high throughout the study. The depression continued almost two years after surgery. Gynecologic cancer patients experienced increased feelings of depression and worsening body image over time.

The study by Cull and associates (1993) reported that 40-50% of the patients with cancer of cervix were persistently tired and lacked energy after treatment, and 60% of the cases had not resumed their full premorbid functional status. Mean scores for anxiety and depression of the patients were higher than those of the general population. Most of them commonly feared of recurrent disease (91%) and more than one third blamed themselves for the disease. Sexual function was rated as significantly poorer than subjectively recalled premorbid sexual function. Lalos, Jacobson, Lalos and Stendahl (1995) studied experiences of male partners of patients with cervical

and endometrial cancers. They indicated that the experiences of sexual intercourse of gynecologic cancer patients were much more negative after treatment.

In summary, diagnosis and treatment of gynecologic cancer have an impact on women's psychosocial and physical well-being. The stressful events of diagnosis and treatment do bring threats to women's health.

Stress and Coping

Stress has been studied from a variety of ways. Selye (1976) defined stress as the nonspecific response of the body any demand made upon it to adapt whether that demand produces pain or pleasure. On the other hand, Ignatavicius and Bayne (1991) realized stress as a stimulus. In this perspective, stress is seen as the event itself or the stressor, not as the response to the event.

Lazarus and Folkman (1984) defined stress as a transaction between a person and the environment. The perception of the stress appears to be related to the person and event within a certain environment. According to this view of stress, the person's interpretation of the event is important to consider. The meaning given to the event by an individual determines an individual appraisals of a situation as stressful.

Lazarus and Folkman's (1984) theory of stress, appraisal and coping refers appraisal to valuative cognitive processes that intervene between the encounter and the reaction. Through cognitive appraisal processes, the person evaluates the significance of what is happening for his or her well-being. There are three kinds of cognitive appraisal: primary, secondary, and reappraisal. Primary appraisal consists of the judgment that an encounter is irrelevant, benign-positive, or stressful. Secondary appraisal is a judgment concerning what might and can be done. It includes an evaluation about whether a given coping option will accomplish what it is supposed to, that one can apply a particular strategy or set of strategies effectively, and evaluation of the consequences of using a particular strategy in the context of other internal and/or external demands and constraints. Reappraisal refers to a changed appraisal based on new information from the environment and/or the person. There are many factors influencing the appraisal. The main factors include personal factors (such as commitments and beliefs) and situational factors (such as novelty, predictability, ambiguity , and the timing of stressful events over the life cycle) (Lazarus & Folkman, 1984).

Coping has been described in the literature in a variety of ways. Researchers described many specific

strategies. Self-discipline was one of the more commonly used, and talking was a universal strategy.

Concept of coping

Lazarus and Folkman (1984) 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. It is a process rather than trait-oriented in that it is concerned with what the person actually thinks or does in specific context, and with changes in these thoughts and actions across encounters or as an encounter unfolds. Coping serves two overriding functions: managing or altering the problem with the environment causing distress (problem-focused coping), and regulating the emotional response to the problem (emotion-focused coping). The way a person copes is determined in part by his or her resources. Those resources include health and energy, existential beliefs, and commitments. Commitments have a motivational property that can help sustain coping, problem solving skills, social skills, social support, and material support. Coping is also determined by constraints that mitigate the use of resources. Problem- and emotion-focused copings influence each other throughout a stressful encounter. They can both facilitate and

impede each other (Lazarus & Folkman, 1984).

Jalowiec, Morphy and Powers (1984) defined coping as a process in which the individual attempts to alleviate stress. Two definitional guidelines were provided to ensure a standardized basis for the coding: (1) problem-oriented coping strategies try to deal with the stressful situation itself; and (2) affective-oriented strategies try to handle the distressing emotions evoked by the situation.

Menninger, Mayman and Pruyser (cited in Foxall & Watson, 1988) defined coping as direct behaviors toward altering the circumstances, sidestepping the issue, and providing a solution. Aquilera (cited in Thelan, Davin, Urden, & Lough, 1994) stated that coping activities encompass all the diverse behaviors that people use to meet actual or potential demands. The available coping mechanisms are those behaviors that a person typically uses to solve problem and relieve anxiety associated with the problem. The individual draws on what he or she has found to be effective in the past.

White (cited in Thelan, Davin, Urden & Lough, 1994) stated that coping is an adaptive strategy. People use coping when face with serious problems that they cannot master with familiar behaviors and uncomfortable effects such as anxiety or grief.

Weissman (cited in Thelan, Davin, Urden & Lough, 1994) viewed coping as a problem-solving process that draws on cognition, judgment, memory and defense mechanisms. Coping skills that people tend to use include steps for problem solving, defense mechanisms, interpersonal strategies such as sharing concerns, and conscious coping mechanisms such as distracting oneself or laughing off a problem. No one strategy is superior. Weissman (cited in Fredette, 1995) developed concept of coping with cancer that was particularly useful with this population. He defined coping process as a combination of perception, performance, appraisal, and correction followed by logical behavior. The most effective copers follow a set of positive directives that guide them through stressful situations.

Measurement of coping

Coping measure has been viewed based on conclusions on clinical judgments and largely descriptive observations from interviews and objectively scored measures.

A widely used inventory of coping behavior is the Ways of Coping Scale (Folkman & Lazarus, 1980 cited in Foxall & Watson, 1988). This measurement includes a broad range of cognitive and coping strategies that may be used by an individual in a specific stressful episode. Items included are

from the domains of defensive coping , information-seeking, problem-solving, palliation, inhibition of action, direct action and magical thinking.

Jalowiec, Morphy and Powers (1984) used Lazarus and Folkman's theory to develop an instrument which was named Jalowiec Coping Scale (JCS) to measure the coping behaviors. This scale and revised JCS have been used in population of acute and chronic diseases such as acute myocardial infarction (Schenk, 1992), multiple sclerosis (Buelow, 1991), and cancers (Guo, 1996; Halstead, & Fernsler, 1994; Perry, 1990). The original scale consisted of 40 items that represented three dimensions of coping: confrontive, emotive and palliative coping. In 1987, Jalowiec revised the JCS. The coping scale was expanded from 40 to 60 items. Some of the items from the original scale were eliminated, some were combined, some were reworded, and new items were added. The coping items were reexamined rationally to determine common conceptual themes, and eight coping styles evolved as the most descriptive of the coping dimensions represented by the 60 items. The eight coping styles are confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant and self-reliant.

Felton and Revenson (cited in Foxall & Watson, 1988) developed a 51-item coping scale based on the Ways of Coping Scale to evaluate the utility of a stress and coping paradigm.

The coping measure consists of six subscales describing qualitatively distinct coping strategies derived through factor analysis of the items. Six subscales include cognitive restructuring, emotional expression, wish-fulfilling fantasy, self-blame, information seeking, and threat minimization. Cognitive restructuring describes individual efforts at finding positive aspects of the illness experience; emotional expression describes expressions of emotional strain; wish-fulfilling fantasy describes efforts to escape from emotional distress; self-blame describes efforts to cloud the issue and refocus attention; information seeking describes the individual's search for facts and advice about the illness and its treatment; and threat minimization involves a refusal to dwell on the illness.

McNett (cited in Ali & Khalil, 1991) developed a measurement named McNett's Coping Effectiveness Questionnaire to measure coping effectiveness. The questionnaire consists of nine items. The six items for well-being subscale address psychological and physiological well-being and the three items for social functioning subscale assess functioning in work and social living.

Of the measurements presented above, three of them were developed based on the Lazarus and Folkman's theory. The revised JCS is only one which had been translated into Chinese

and used in Chinese women with postmastectomy (Guo, 1996). The Chinese version of the revised JCS was reliable with Cronbach alpha of 0.85 (Guo, 1996). Therefore, it was used to study coping of gynecologic cancer patients in this study.

Coping of patients with cancer

Coping of patients with cancer has been studied by several researchers. However, very few studies have focused on coping of gynecologic cancer patients. Therefore, information regarding coping in patients with various types of cancer is reviewed and presented.

Studies have shown that patients with cancer used several coping strategies. Sodestorn and Martinson (1987) specifically investigated spiritual coping strategies in 25 hospitalized American patients with cancer. They found that 96% of the subjects were members of religious organization. The results showed that the coping strategies most frequently used by the subjects were personal pray and asking others to pray for them. Other strategies frequently used included watching religious program on television and listening the radio program.

Sheila and Payne (1990) investigated coping among women with breast cancer and ovarian cancer who received chemotherapy in the hospital and at home. The results

indicated that the women had adopted different coping styles including positive thinking, acceptance, fearfulness and hopelessness. Positive thinking, and acceptance were major adoptable. Women who adopted positive thinking style felt their cognitive actions largely determined the outcome of treatment. Acceptance was that the women were realistic in their assessments of their disease and their life chances.

Perry (1990) used the Jalowiec Coping Scale (JCS) to study coping styles of the adult cancer patients who stayed at home (N=41). Confrontive and palliative coping styles were found most favored. Conversely, the emotive coping style was noted among the least favored.

Mishel and Sorenson (1991) tested the mediating functions of mastery and coping in 131 women receiving treatment for gynecologic cancer. They found that wishful thinking, one of the emotion-focused coping strategy, and focus on positive aspects, which was a problem-focused strategy, had statistically significant mediating effects. The gynecologic cancer patients selected those two strategies to reduce the sense of danger.

In Krause's (1991; 1993) qualitative studies, subjects of 120 patients with various types of cancer were interviewed with open-ended questions to identify the ways of coping. The strategies used by the patients to cope with cancer were

finding out about the disease, confronting situation, comparing with other patients who had recovered from cancer, thinking of hope, participating in social activity or work, and seeking for support from relatives and helpers. The passive defense mechanisms, such as denial, and attempt to forget the disease were also used by some patients.

In studies of Dodd, Dibble, and Thomas (1992; 1993), the non-randomized sample of 64 cancer patients who were initiating a course of outpatient chemotherapy either for curative intent or for disease control and palliation was obtained from seven health care settings. They found that coping strategies most frequently used by the patients were direct action, seeking information, and seeking social support.

In Lev's (1992) qualitative study, she investigated coping of both male and female cancer patients undergoing chemotherapy and radiotherapy. The results showed that the information seeking coping was used by all cancer patients and it was reported as helpful. Giving oneself rewards and social support were also significant coping strategies.

Carver, Pozo, and Harris (1993) reported that the breast cancer patients used different coping to deal with the distress. Acceptance, positive reframing, and use of religion were the most common coping reactions, whereas denial and

behavioral disengagement were the least common reactions. Stenton (1993) also expressed cognitive avoidance coping was a particularly important predictor of high distress and low vigor.

Zacharias, Gilg, and Foxall (1994) used the Coping Scale developed by Felton and Revenson to study the coping of 40 patients with gynecologic cancer and their spouse. They found that the patients used cognitive restructuring and threat minimization more significantly than did their spouse. For the patients, cognitive restructuring was the most prevalent coping strategy. Self-blame was least often used by the patients. The patients were more inclined to think about the positive aspects of their illness and to face the reality of situation. The results suggested that the patients had begun to face with the real illness.

Fredette (1995) used a semistructured interview to study coping of 14 breast cancer survivors who had lived at least 5 years after diagnosis of breast cancer. The study showed that the cancer survivors used multiple coping method, the majority of which were the problem-focused strategies. The strategies used by all of the survivors were working and spirituality. Information-seeking and support from significant others were also major coping methods cited by most of the survivors.

Guo (1996) used the revised JCS to study coping of 57 Chinese postmastectomy patients. The results showed that different coping styles were used by the postmastectomy patients. The most frequently used coping styles were: optimistic, confrontive, and self-reliant. Emotive, evasive, and palliative coping styles were relatively less used.

Judy, Lavery, Valerie, and Claeder (1996) used questionnaires to measure coping strategies in 244 breast cancer patients. They classified coping as problem-focused and emotion-focused. They identified coping strategies in six aspects: information-seeking behavior, alternative to medical therapy, change in social behavior, helplessness, anxious preoccupation, and fatalism. The results indicated that the women would be more likely to use problem-than emotion-focused coping strategies. The women in this study had become actively evolved in their efforts to fight their illness, rather than adopting emotion-focused coping strategies, such as helplessness or fatalism in an effort to relieve the emotional aspects of the stressful situation.

Cancers lead patients to chronic sorrow. Coping with chronic sorrow of the cancer patients has been studied by Eakes (1993) and Hainsworth, Eakes, and Burke (1994). They concluded that the cancer patients commonly used interpersonal, emotional, cognitive and action-oriented coping

strategies to deal with grief-related feelings.

As presented previously, most studies focused on the use of coping. Only two studies examined both the use and effectiveness of coping strategies. Ali and Khalil (1991) used the open-ended question to examine the use of coping strategies of 64 breast cancer women. Coping strategies reported by the women were categorized into four groups: faith, compliance with medical regimen, seeking information and social support, and self-distraction. Most of the women cited faith as their first coping strategy, followed by compliance with the medical regimen and family support. Coping effectiveness was measured by the modified McNett's Coping Effectiveness Questionnaire (cited in Ali & Khalil, 1991) which included two subscales, modified social functioning and modified well-being. However, the effectiveness of each coping strategy was not determined in this study.

Halstead and Fernsler (1994) used the revised JCS to study the use and effectiveness of coping in the long-term cancer survivors both female and male. The result showed that the optimistic coping style was used most frequently by the respondents. Supportant, confrontive, self-reliant and palliative strategies were used frequently also. Evasive, fatalistic, and emotive strategies were used by half of the respondents. Optimistic strategies were reported by the

respondents as the most effective, followed by palliative and self-reliant strategies. The least effective strategies were evasive, fatalistic and emotive. Optimistic, supportant, confrontive, and palliative strategies were often used and very helpful. "Prayed or put trust in God" was often used and very helpful coping behavior.

From the literature reviewed above, patients have used different coping styles to cope with the situations they faced and their options were related to their own characteristics.

Coping among different age groups

According to literature review, age is a related factor of emotional distress and coping. Mor, Allen and Mallin (1994) found that younger patients with cancer displayed significant difference in emotional distress with older patients. Frischenschlager, Hohenberg, and Handl-Zeller (1990) studied relationship between age and individual strategies of coping with stress in female cancer patients. The result showed that age was significantly correlated with coping strategies. Ali and Khalil (1991) examined the relationship between coping effectiveness and age of 64 Egyptian women who had mastectomy. The result showed that age was significantly and positively correlated with total coping effectiveness and modified well-being. The researchers explained that the older

women were accepting than the younger.

Dodd and colleagues (1992) studied coping of 64 adult cancer patients undergoing chemotherapy and their family members. They found that patients' age was negatively correlated with the total number of coping strategies. That is to say, the older patients used fewer coping strategies. However, for the coping effectiveness, the older patients did not use less effective strategies than the younger patients.

Halstead and Fernsler (1994) compared coping of three groups of young age (20-40 years), middle age (41-60 years) and old age (>60 years) of different types of cancer patients. The results indicated that significant differences for the use of coping existed between age groups in the optimistic, emotive, and palliative categories. The elderly group scored higher for the use of optimistic and palliative coping strategies than did the middle-aged group. The middle-aged group scored higher for the use of emotive strategy. The results also showed that there was a difference in the effectiveness of coping among three age groups. The elderly group perceived the optimistic, palliative, and supportant strategies as significantly more effective than did the young and middle-aged groups.

In study of Guo (1996), the revised JCS was used to examine the relationship between coping and age of Chinese postmastectomy patients. The result confirmed that only the supportant coping style was significantly and negatively related with age of the postmastectomy patients.

Summary of Literature Review

Cancer generally is a stressful experience for patients because of the physical and psychosocial factors associated with the disease, prognosis, and treatment. Patients with cancer used different types of coping strategies to deal with the stress they confronted. Most of studies indicated that the cancer patients used problem-focused coping more frequently than emotion-focused coping and many studies suggested that problem-focused coping be an effective coping. Studies also indicated that age was an important factor influencing the use and effectiveness of coping. Many researches have been conducted to study coping among different age groups in female cancer patients but few of them have been done in gynecologic cancer patients. In China, no literature has been found to study coping of gynecologic cancer patients of different age groups. Thus, research in this area is needed to provide knowledge in China.

Conceptual Framework of Study

This research was guided by Lazarus and Folkman's (1984) theory of stress, appraisal and coping. Within the framework, diagnosis and treatment of gynecologic cancer were perceived as stressors. Stressors enter the system and were assessed by a gynecologic cancer patient through her cognitive screens. In primary appraisal, she might assess the impact of diagnosis, treatment or prognosis. She would weigh it either threatening or nonthreatening. If identified as threatening to self and/or goals, the patient's response would depend on her coping strategies and coping styles (secondary appraisal). Stress might be buffered through using coping strategies of different coping styles.

Based on Lazarus and Folkman's (1984) theory, Jalowiec (1987) further identified eight types of coping style: confrontive, evasive, optimistic, fatalistic, emotive, palliative, supportant, and self-reliant. Evaluations of coping options, which are secondary appraisal, include an evaluation about whether a given coping option will accomplish what it is supposed to and an evaluation of the consequences of using a particular strategy in the context of other internal and/or external demands and constrains. One can apply a particular strategy or set of strategies effectively.

The coping styles that gynecologic cancer patients choose were assessed by revised JCS (1987) in operative level to manage their emotion and by trying to achieve as effectiveness of coping. The use and effectiveness of coping may be different among different age groups.