# กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก

นาวาอากาศตรีหญิงวัชราภรณ์ เปาโรหิตย์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาพยาบาลศาสตรดุษฎีบัณฑิต
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# COPING PROCESS WITH FEAR OF CANCER RECURRENCE AMONG THAI COLORECTAL CANCER SURVIVORS

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A Dissertation Submitted in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy Program in Nursing Science
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นาวาอากาศตรีหญิงวัชราภรณ์ เปาโรหิตย์ : กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก (COPING PROCESS WITH FEAR OF CANCER RECURRENCE AMONG THAI COLORECTAL CANCER SUVIVORS) อ. ที่ปรึกษา: ร.ศ. ดร. จินตนา ยูนิพันธุ์ 176 หน้า ISBN 974-14-2517-1

วัตถุประสงค์ของการวิจัยเพื่ออธิบายการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำและสร้างแบบจำลองอธิบายกระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก การศึกษาครั้งนี้เป็นการศึกษาเชิงคุณภาพโดยใช้วิธีทฤษฎีฐานรากเพื่อสร้างแบบจำลองอธิบายกระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำ ผู้เข้าร่วมในการศึกษาครั้งนี้คือ ผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก จำนวน 22 ราย ซึ่งคัดเลือกตามเกณฑ์คุณลักษณะที่กำหนดในการศึกษาจากผู้มารับบริการที่โรงพยาบาลแห่งหนึ่ง โดยการเก็บรวบรวมข้อมูลที่แผนกผู้ป่วยนอกของศัลยกรรม แผนกผู้ป่วยนอกของรังสีรักษา และที่บ้าน วิธีการที่ใช้ในการเก็บรวบรวมข้อมูลคือการสัมภาษณ์เชิงลึก การสังเกต และการจดบันทึกภาคสนาม ข้อมูลถูกนำมาวิเคราะห์เปรียบเทียบตลอดกระบวนการศึกษา ผลจากการศึกษาได้แบบจำลอง " การมีชีวิตอยู่กับการควบคุมความกลัวการเกิดมะเร็งกลับซ้ำ" ซึ่งสามารถอธิบายกระบวนการที่ใช้ในการเผชิญปัญหาซึ่งประกอบด้วยการเปลี่ยนแปลง6 ขั้นตอนที่เกิดขึ้นอย่างต่อเนื่องคือขั้นการกลัวการเกิดมะเร็งกลับซ้ำซึ่งประกอบด้วยการกลัวความตาย การกลัวความเจ็บปวดทุกข์ทรมาน การกลัวเป็นภาระ การกลัวมะเร็งกระจายไปยังอวัยวะต่างๆทำให้เกิดขั้นการแสวงหาและการรับรู้ข้อมูลเกี่ยวกับสาเหตุการเกิดโรคและวิธีการป้องกันการเกิดมะเร็งกลับซ้ำ ซึ่งส่งผลต่อขั้นการเกิดความรับผิดชอบต่อตนเองที่ประกอบด้วยการเตือนตนและการพยายามทำให้ดีที่สุด และทำให้เกิดการเปลี่ยนแปลงไปสู่ขั้นการสร้างความแข็งแรงให้กับร่างกายและขั้นการพัฒนาจิตใจให้เข้มแข็งซึ่งเกิดขึ้นพร้อมกันในลำดับต่อมา การสร้างความแข็งแรงให้กับร่างกายประกอบด้วยการเปลี่ยนแปลงพฤติกรรมสุขภาพ การทำตามแผนการรักษาของแพทย์ การใช้การรักษาทางเลือกและการจัดการกับตนเองเพื่อเฝ้าระวังการเกิดมะเร็งกลับซ้ำ การพัฒนาจิตใจให้เข้มแข็ง ประกอบด้วยการค้นหาความมั่นคงทางจิตใจ การควบคุมความคิด การจัดการกับภาวะเครียด และการสร้างพลังอำนาจให้กับตนเอง ซึ่งสามารถนำไปสู่ขั้นการเปลี่ยนแปลงที่ทำให้ความกลัวการเกิดมะเร็งกลับซ้ำลดลง แต่เมื่อมีเหตุการณ์ที่สามารถกระตุ้นให้เกิดความกลัวการเกิดมะเร็งกลับซ้ำระดับความกลัวดังกล่าวจะเพิ่มขึ้น ส่วนความเชื่อส่วนบุคคลและการสนับสนุนทางสังคมมีปฏิสัมพันธ์ต่อวิธีการที่ผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนักเลือกใช้ในการเผชิญปัญหาการกลัวการเกิดมะเร็งกลับซ้ำ

ผลจากการศึกษาสามารถนำไปใช้ในการกำหนดทิศทาง เพื่อการพัฒนาการดูแลด้านจิตใจ และส่งเสริมความผาสุกทางจิต รวมทั้งการทำโครงการเพื่อพัฒนาการดูแลด้านจิตใจ ตลอดจนการให้คำปรึกษาในการจัดการกับความกลัวการเกิดมะเร็งกลับซ้ำโดยมีจุดมุ่งหมายหลักคือช่วยผู้รอดชีวิตภายหลังการรักษามะเร็งลำไส้ใหญ่และทวารหนักให้มีความสามารถในการจัดการกับความกลัว เกิดการปรับตัว และการมีคุณภาพชีวิตที่ดีในระยะโรคสงบ

สาขาวิชาพยาบาลศาสตร์ ลายมือชื่อนิสิต..........................................

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The objectives of this study were to explain how the Thai colorectal cancer survivors coped with their fear of cancer recurrence and to generate the explanatory model that explained how the Thai colorectal cancer survivors performed the coping process for their fear of cancer recurrence. To meet the objectives of this study, the Grounded Theory was used as the research methodology. Data were collected by in-depth interviews, observations, and field notes that took place in the Outpatient Surgical Department, the Outpatient Radiotherapy Department of the selected hospital and home settings. The study of the experiences of twenty-two Thai colorectal cancer survivors explained the holistic view of the coping process of the fear of cancer recurrence. Data were analyzed by constant and comparative methods. The study generated the explanatory model "Living with Controllable Fear of Cancer Recurrence." The model was composed of six stages, which occurred consecutively. It began with recognizing fear, then the stage of obtaining information appeared, participants sought information about causes of cancer and how to prevent cancer recurrence, the information obtained influenced the stage of accepting self- responsibility, which was composed of self- reminding, and doing one's best. Then the stage of building physical strength occurred when the participants changed their habits, committed to modern medicine, used alternative medicine, and performed self-monitoring. Building physical strength and developing psychological strength occurred simultaneously. Psychological strength was composed of finding a psychological secure base, controlling thought, managing stress, and empowering self. Finally, the stage of decreasing fear occurred.

This knowledge is expected to provide the direction to develop psychological care and promote a psychological healthier outlook on life for Thai colorectal cancer survivors. This knowledge can also be used to create counseling sessions. The ultimate goal is to aid Thai colorectal cancer survivors manage the impact of their fear of cancer recurrence and enhance their quality of life after colorectal cancer treatment is in the remission stage.

Field of study Nursing Science
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Student's signature Watcharaporn Paorohit
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# CHAPTER I

# INTRODUCTION

## The Background of the Study

The Ministry of Public Health of Thailand (2001) reported that colorectal cancer was the third most common cause of death during 1995 to 1997. The number of colorectal cancer patients increased from 4,834 cases reported in 1996 to 6,218 cases reported in 1999. It was the third most common malignancy in men and the fourth most common in women (National Cancer Institute, Thailand, 2003). Colorectal cancer was becoming a national public health problem. The increase of colorectal cancer has been attributed to a higher consumption of animal fats and a lower consumption of dietary fiber (Pichainarong, Chaveepojnkamjorn, Patumanond, Supudommungme, 2000). This was combined with ineffective screening strategies in Thailand (Deerasamee and Srivatanarak, 1999 and Jirajarus, 1996). The incidence of colorectal cancer in Thai people is expected to double in the next decade (Treerutkuarkul, 2006). It is estimated that the new cases will increase to 10,000 in 2008 (Sriplung, 2003).

Cancer was perceived as the disease of death (Bailey and Clarke, 1989). The course of cancer progressed over time. The trajectory of cancer was defined as the stage of cancer diagnosis, the stage of therapeutic steps, the stage of disease remission, the stage of disease recurrence, and the stage of dying (Ladawan, 2005). Individuals with cancer encountered physical and psychological problems and coped with the trajectory of disease in each stage differently (Lubkin, 1995). Several studies addressed coping in the stages of cancer diagnosis, the stage of therapeutic steps, the stage of disease recurrence, and the stage of dying but there was less information about coping process in the stage of disease remission.

The stage of disease remission, individuals hoped for cure and recovery from the disease, but they still had fears about cancer recurrence (Camevalik and Reiner, 1990). This stage, psychological studies of colorectal cancer survivors have yielded high levels of stress after their treatment, approximately from 41% to 44%. The studies determined that psychological stress was associated with the fear of cancer recurrence (DeLeeuw and Ros, 2003; Mahon, 1990 and Vickberg, 2003). The fear of cancer recurrence affected the colorectal cancer survivors' quality of life (Baum, 2003 and Cancer Research, 2004). The colorectal cancer survivors may experience many symptoms such as anxiety, a feeling of hopelessness, trouble sleeping and eating, changes in appetite, problems concentrating and making decisions. They may also misinterpret natural bodily symptoms, participate less in activities that they once enjoyed and experience changes that interfere with work and family relationships. These impacts could interfere and diminish the colorectal cancer survivor's quality of life. They could result in a weakening of the immune system, in turn allowing the cancer cells to proliferate (American Cancer Society, 2002; American Society of Clinical Oncology, 2004; Dietz, Remington, Moinpour, and Hamton, 2003; Fawzy, 1993; Lee-Jones and Humphris, 1997; Livneh, 2000; King, 2001 and Vickberg, 2003). Consequently, the negative affects from the fear of cancer recurrence required the adoption of effective coping mechanisms.

Individuals responded to cope with fear differently depending on personality, background, and culture (Robinson, 1971). Culture is an important aspect of coping research because it can provide an understanding of how people think and how they react to stressors. People from different cultures may interpret the meaning of an actual event and respond to that event in different ways (Ellworth, 1994). An understanding of the cultural context can contribute to a more complete picture of the coping process

(Lazarus and Folkman, 1984). In addition, different cultural beliefs about the causes of the illness can lead to different coping strategies (Cameron, 1987 cited in Pongthavornkamol, 2000). Coping strategies are components of coping processes, because coping strategies strive to manage stressors using variety of methods that constantly change (Moos and Tsu, 1997).

Culture plays an important aspect in the coping process. It involves knowledge, beliefs, art, morality, law, and customs. The Buddhist religion and Thai culture are intimately linked together. Thai people believe in the Buddhist religion, the Law of Karma, and life after death. Some believe that the cause of cancer is a result of retribution according to the Buddhist religion. The belief in the cause of cancer varies in each cancer survivor. Some believe cancer comes from unhealthy habits, while others think it is food and still more think it is supernatural forces (Burnard and Naiyapatana, 2004; Klausner, 1993; Ratanajarana, 2005, and Tongprateep, 2000). These beliefs influence their thoughts and coping mechanisms. An awareness of Thai culture and beliefs is an important aspect of a coping process. Therefore, the beliefs of Thais may vary in the same situation, this may lead to a different interpretation, and thus it can result in a different coping process.

A contemporary research in Thailand focused on cancer coping patients and mainly provided a theme and not a process. It can be summarized as positive thought, optimism, spirituality, confrontational, social support, passive acceptance, thought avoidance and situational control. Lazarus and Folkman (1984) defined coping as “constantly changing cognitive and behavioral efforts to manage (reduce, minimize, master or tolerate) specific external and /or internal demands that are appraised as taxing or exceeding the resources of the person”. Lazarus and Folkman (1984) emphasized coping as a process that is “constantly changing.” The majority of quantitative research focused on the work of Lazarus and Folkman (1984). Much of the research used self-reporting and checklists. Coyne and Rcioppo (2000); Somerfield and McCrae (2002) argued that when coping was reduced to scores, crucial elements such as timing and appropriateness may be lost. Besides, those methods were not specific thought, specific context, or slices of time. Thus, an understanding of coping as a process was found to be limited in Thai cancer research.

Rattanajarana (2005) stated that the appropriateness of coping derived from the preferences of cancer survivors who created coping mechanisms and processes and was associated with an individual’s condition. There were attempts to help cancer patients and survivors without their having an awareness of their coping process. This may be ineffective and potentially harmful (McHaffie, 1992). Obviously, few studies attempted to investigate the coping process among Thai colorectal cancer survivors, particularly the fear of cancer recurrence. As a result, an understanding of the coping process as relating to the fear of cancer recurrence is less well researched and needs to be investigated.

Fear of cancer recurrence was a function of stress. It could diminish the Thai colorectal cancer survivors’ quality of life. The limitation of knowledge relating to a coping process of the fear of cancer recurrence could lead to the limitation of the appropriateness of the direction for nursing care of psychological coping as a holistic view. Thus, nurses need to understand the coping process with the fear of cancer recurrence. Since the process of change created an understanding of the coping process, this would help to give nurses insight into different circumstances such as times, thoughts, and behaviors in a specific context. The nurses’ understanding could assist the Thai colorectal cancer survivors in dealing with the fear of cancer recurrence that required different solutions and helped them adapt to their fear of cancer recurrence.

## Objectives of the Study

The objectives of this study were to explain how the Thai colorectal cancer survivors coped with their fear of cancer recurrence and to generate the explanatory model that explained how the Thai colorectal cancer survivors performed the coping process for their fear of cancer recurrence.

## Research Question

How did the Thai colorectal cancer survivors perform the coping process for their fear of cancer recurrence?

## Scope of the Study

Thai colorectal cancer survivors in the study were determined cancer free by their physician after complete colorectal cancer treatments. The investigations were carried out when the colorectal cancer survivors visited their physician during the medical appointments for a normal check up at the Surgical and Radiotherapy Outpatient Department of the selected hospital. In some cases, the investigation could not be done while visiting the physician, in these instances home visits was performed to seek information relating to how colorectal cancer survivors dealt with the fear of cancer recurrence.

## Definitions

**Colorectal cancer survivor** referred to patients who were diagnosed with colorectal cancer and had no sign or symptoms of cancer recurrence after completing colorectal cancer treatment

**The coping process with the fear of cancer recurrence** referred to a series of cognitive and behavioral efforts that the Thai colorectal cancer survivors performed to manage, lessen, and control their fear of cancer recurrence. The definition of the coping process for the fear of cancer recurrence was provided as a preliminary definition of the study. The purpose was to generate questions to search for a coping process for the fear of cancer recurrence and then the core meaning was identified as it emerged from the participants' perspective, which was grounded in data.

## Significance of the Study

This study provided a descriptive knowledge and generated the explanatory model of the coping process with the fear of cancer recurrence among the Thai colorectal cancer survivors. Since there was a limited knowledge of the coping process, this study created a model that could provide new descriptive knowledge to enable nurses to understand how Thai colorectal cancer survivors dealt with the fear of cancer recurrence as holistic views. This knowledge could be guided in a direction for a psycho-educational program and create a counseling session that could assist Thai colorectal cancer survivors lessen and control their fear of cancer recurrence. The knowledge could also help the colorectal cancer survivors develop coping skills in dealing with their fear and manage the impact of their fear effectively. These could enhance emotional equilibrium, promote the psychospiritual healthier life outlook, and help the Thai colorectal cancer survivors adapt to the situations they were living with. The ultimate goal was to enhance their quality of life in their remission stage after colorectal cancer treatment.

# CHAPTER II

# LITERATURE REVIEW

This chapter proposed a review of the literature that related to the study. A review of the literature could provide some crucial details into the phenomena of the coping process with the fear of cancer recurrence that could assist in the development of interviews, initial observation guidelines, and ultimately insight into theoretical sensitivity. It dealt with the continuum of conducting the study. To provide an understanding the coping process with fear of cancer recurrence, the related literature proposed topics as follows:

1. Colorectal cancer
    - 1.1 Etiology of colorectal cancer
    - 1.2 Life style and risk factors of colorectal cancer
    - 1.3 Clinical presentation
    - 1.4 Staging
    - 1.5 Treatment procedure of colorectal cancer
    - 1.6 Follow up guideline for colorectal cancer survivors.
    - 1.7 Cancer survivor
2. Fear of cancer recurrence
    - 2.1 The development of fears
    - 2.2 Why people fear cancer recurrence?
    - 2.3 Effect of fear of cancer recurrence
        - 2.3.1 Effect of fear of cancer recurrence and immune response.
        - 2.3.2 Effect of fear of cancer recurrence and quality of life.

3. The coping process
    - 3.1 Theories of stress and coping.
    - 3.2 Coping with cancer
    - 3.3 Coping with the fear of cancer recurrence
    - 3.4 Factors influence coping in Thai cancer patients.

## 1. Colorectal Cancer

Colorectal cancer (CRC) is known as cancer of the colon and the rectum. It is the most common cancer that affects men and women. It mainly affects people over the age of fifty but can occur at any age. It is slightly more common in men than in women. Colorectal cancer starts in the lining of the bowel (mucosa). If untreated it spreads deeper into the wall of the bowel. From there, it can spread to lymph nodes in the area. Later, bowel cancer can spread to the other adjacent organs (The Cancer Council Victoria, 2003).

1.1 Etiology of colorectal cancer. The exact cause of cancer of the colon and the rectum is unknown (Berg, 2002; Cancer Council Victoria, 2003; Duncan, 1982). The risk factors for colorectal cancer (CRC) are age and family history, adrenomatus polyps, genetic and environment factors such as lifestyle which are nutrition, alcohol, sedentary life style and cigarette smoking (Levin, 2000; Murphy, 1997). People cannot change their genes, but they can influence their lifestyle to decrease the odds of their developing cancer (Berg, 2002). Studies by Pibulniyom and Poovasatien (1998); Pichainarong, Chaveepojnkamjorn, Patumanond, Supudommungme (2000) and Treerutkuarkul (2000) determined eating style and nutrition changes were a major cause of colorectal cancer in Thailand.

1.2 Life style and risk factors of colorectal cancer. Since Thailand has moved towards a more industrial economy, it has resulted in inequitable income distribution among the Thai population. Many men and women have moved from a rural to an urban setting to find a job and a more substantial means to supporting their families. This has led to the change in role of women. Women had less time to spend cooking; they spent money for ready-to-cook and ready-to-eat (Pibulniyom and Poovasatien, 1998; Ratatnajarana, 2005). It could result in changes in dietary behavior. Besides, commercial activities and successful advertising such as fast food (pizza, hamburger, fried chicken, doughnuts, and soft drinks) also influenced changes in dietary behavior. There has been a trend of changes dietary behavior from a traditional diet, which was high in cereal content and low in fat to a more Western diet. It could lead to Thai people consuming more calories and cholesterol with a high animal fat content (Kosulwat, 2000). As a result, this change of eating habits contributed to an increase in the incidence of non- infectious diseases including obesity, heart disease, and colorectal cancer in Thais (Kosulwat, 2000; Pibulniyom and Poovasatien, 1998).

1.3 Clinical presentation. Colorectal cancer (CRC) develops from a polyp on the inner surface of the bowel that was not found and removed. The malignant polyp continues to grow and develop into a tumor mass that spread through part or the entire bowel wall. The tumor can invade nearby organs, lymph node and blood vessel, and can spread to distant sites within the body. Approximately 75% of tumors develop in the left side of the colon, 15% develop in the right side of the colon and 10% develop in transverse colon (Berg, 2002; Dulcan, 1982).

1.4 Staging. Accurately determining the extent of the cancer staging is critical to establish both therapeutic strategies and prognosis. The staging of CRC is based on three key elements: depth of the tumor penetration through the bowel wall, presence, or absence of lymph node involvement (including number of positive lymph nodes) and whether or not cancer has metastasized to distant areas. The two most staging schemas are the Duke's Staging System and the American Joint Commission on Cancer Tumor Node Metastasis System. The Tumor Node Metastasis System is recommended. Because, it is internationally accepted and provides a detailed prognosis. The stage of disease at diagnosis is the most important prognostic factor and thus has an implication for a long-term outcome. Individuals diagnosed at a localized stage (tumor confined in the colon or rectum) have a 90% chance of living 5 years, which decreases to 65% if there is regional disease (tumor that has spread to regional lymph node) and to 9% when cancer has metastasized to distant sites. Other factors favoring a good outcome include a well or moderately differentiate tumor and micro-satellite inability. Factors denoting a poor outcome include poorly differentiated tumors, lymphatic or vascular invasion, regional lymph node metastasis, obstruction or perforation at diagnosis, and specific genetic abnormalities (Varricchino, Ades, Hinds and Piece, 2004).

**Table 1** The American Joint Commission on Cancer Tumor Node Metastasis (TNM) System, 2002 (cited in Varricchino, Ades, Hinds and Piece, 2004).

Tumor (T)

| Descriptor | Definitions |
|---|---|
| Tis | carcinoma in situ |
| T1 | Tumor invades through mucous into sub-mucosa |
| T2 | Tumor invades through sub-mucosa into muscular layer (muscularis propia) |
| T3 | Tumor invades through muscularis propia into subserosa or into non-peritonealized or perirectal tissue. |
| T4 | Tumor perforates completely through the colonic/rectal wall into visceral peritoneum or directly invades or adheres to other organs or structures |
| Lymph Node (N) | |
| NX | regional lymph node cannot be assessed because of incomplete information |
| NO | no regional lymph node involvement |
| N1 | cancer cells found in 1 to 3 regional lymph nodes |
| N2 | cancer cells in more than 4 regional lymph nodes |
| Metastasis (M) | |
| MX | distant metastasis can not be assessed because of incomplete information |
| MO | no positive distant spread found |
| M1 | distant spread is present |

**Table 2** Duke's Staging System and the American Joint Commission on Cancer Tumor Node Metastasis (TNM) System 2002.

| Stage | | TNM Descriptors | | Duke Stage Correlation |
|---|---|---|---|---|
| 0 | Tis | NO | MO | _ |
| I | T1-2 | NO | MO | A |
| II | T3-4 | NO | MO | B |
| III | Any T | N1 | MO | |
| | Any T | N2 | MO | C |
| IV | AnyT | AnyN | M1 | Later called D |

**Source**: Adapted from the American Joint Commission (AJCC) 2002 on Cancer Tumor Nodes Metastasis (TNM).

Most Thai patients first come to the hospital too late, when cancer is already invasive. Symptoms that caused the patients to come to the hospital were bowel obstruction or perforation of the colon, rather than coming at the first sign of bleeding from the rectum (Chongthawonsatid, 1998). Hanucharurnkul, Jirajarus, and Ratanatharathorn (1997) reported that Thai patients thought the symptoms they experienced such as changes in their bowel habits were not symptoms of the disease. They went to visit the physician when the disease was invasive with the symptom of severe pain. Rattanajarana (2005) concluded that Thai patients normally go to a hospital for the first time when the disease has already progressed to a very serious stage, which would require a colostomy for palliative treatment. Surgical treatment in

Thailand can cure only 20% of patients because, most patients come to the hospital too late, when cancer is already invasive or there is an obstruction or perforation of the colon, rather than coming at the first sign of bleeding from the rectum and then complicate treatment are needed.

1.5 Treatment Procedure of Colorectal Cancer. In general, colorectal cancer treatments are a combination of treatments. It depends on the stage of the disease. The decision to operate on a patient is determined by the size, the number, and position of the tumors and the general health of the patient (Lunn, Hunrell and Campbell, 1999). Colorectal cancer patients who were in the second stage of the disease will receive treatment by adjuvant therapy, chemotherapy, radiotherapy, and biotherapy. Its aim is to reduce the risk of local and regional recurrence. There was evidence that 40% of patients who receive adjuvant therapy had a recurrence at five years after treatment (Cohen, Minsky and Schilky, 1997). Most Thai colorectal cancer patients first come to the hospital when the disease has already become invasive (Hanucharurnkul, Jirajarus and Ratanatharathorn, 1997). Rojanasakul (1999) stated that surgical treatment could cure colorectal cancer in only 20 % of the patients. Palliative care can assist about 59%. For the remaining 17.7 % of patients, surgical treatment is not possible.

1.5.1 Surgery. The goal of treatment by surgery is to remove the tumor and preserve as much functional capacity as possible. Eighty-five percent of primary treatment for potential curable cancer was by surgical resection. Localize cancer can be cured by surgery (Boyd, 1997). The amount of colon removed depends on the mesenteric nodal resection and depends on the location of the tumor, the degree of the tumor invasion, tumor mobility, accessibility size, and the extent of involvement of the lymph nodes. Other surgical procedures were also carried out at the time of the removal process (Rolandelli and Roslyn, 1997). However, in rectal cancer, there must be at least a 2-cm surgical margin and a complete excision of the mesorectum (Berg, 2002; Bleiberg et al, 2002; Varricchio et al 2004). Long, Phipps and Cassmeyer (1993) explicated a technique for colon cancer called “end to end anastomosis.” This technique is suitable for colon cancer which occurs in the ascending colon is called right hemi-colectomy, for the descending colon it is called left hemi-colectomy, sigmoid colon and in the upper rectum it is called recto- sigmoid resection. Colostomy is a procedure for making an opening in the colon at the skin surface of the abdomen, and is normally created either on a temporary or permanent basis (Rolandeli and Roslyn, 1997).

In Thailand, treatment by right and left half colectomy is considered an appropriate for surgical procedures of colon cancer and colostomy is considered an appropriate treatment for rectal cancer. However, the chance of a colostomy in Thailand is higher than in western countries because, the location of the tumor in Thais is mainly in the rectum, which would usually necessitate a colostomy, and the disease has progressed to a very serious stage, which requires a colostomy for palliative treatment (Hanucharurnkul, Jirajarus and Ratanatharathorn, 1997). Sirichainan (2005) explained that patients who received chemotherapy and radiotherapy undergo a curative operation, which uses the sphincter–preservation procedure when it was appropriate.

1.5.2 Chemotherapy for the treatment of colorectal cancer (CRC) is being actively studied. Since 1990, adjuvant chemotherapy given after surgery has been recommended for colon cancer with regional involvement of stage II (Berg, 2002;

Dulcan, 1982). The treatment uses cytotoxic chemotherapy drugs to cause anti tumor effects through individual cancer cells. Cytotoxic chemotherapy drugs can be administered in a variety of forms including intravenous, oral, intramuscular, intra-arterial preparation. Chemotherapy can be used in the preoperative period in order to reduce the tumor before operation and minimize the degree of surgical invasion. It can be used as an early treatment for the micro metastasis to promote a good response to other treatments including surgery (Lunn, Hunrell and Campbell, 1999).

In Thailand, the regimen follows the National Comprehensive Cancer Network ( NCCN) Guideline (2002) which indicates the rectal cancer patients whose tumor invades through muscle layer, subserosa or other organs, whether the lymph nodes is involved or not, should receive adjuvant therapy and chemotherapy, either preoperative or postoperative. It is evident that colorectal cancer treatment by chemotherapy, in the period before an operation, colorectal cancer patients received 5-FU–base treatment, with or without leucoverin (Sirichainan, 2005).

1.5.3 Radiotherapy is an important therapeutic modality in the treatment of rectal cancers. In colon cancer, radiation has a limited value because of possible damage to adjacent organs and the small intestine (Varricchio, 2004). In colorectal cancers, radiation therapy given before or after surgery reduces the local regional recurrence rate. Radiation therapy may be given alone or in combination with surgery or chemotherapy (Bleiberg et al, 2002). Sirichainan (2005) defined the colorectal cancer patients who received chemotherapy was followed by pelvic radiotherapy. Then patients who received a course of radiotherapy underwent a curative operation. Some patients whose tumor was still large received chemotherapy and radiotherapy instead of undergoing the operation.

In conclusion, curative treatment Thailand has a low success rate. The percentage of patients receiving curative surgery is increased if patients receive treatment at an early stage of the disease. The chance is less if the patients receive treatment when the disease progress. However, there is evidence that colorectal cancer patients who can survive more than five year is 51% of colon cancer patients and 41 % of rectal cancer patients (Chongthawonsatid, 1998). The patient who survived from cancer is called “a cancer survivor” (Rendel, 1997).

1.6 Follow up Guidelines for Colorectal Cancer Survivors. In general, several hospitals provide follow up guidelines for colorectal cancer survivors who have completed colorectal cancer treatment. The colorectal cancer survivors must follow general screening guidelines for follow up testing to ascertain their physical status. The guidelines provided to colorectal cancer survivors are as follows:

(a) After complete colorectal cancer treatment, the cancer survivors need a check-up every 3 to 6 months for the first three years and then every 6 months for the next two years.

(b) Carcinogenic Embryonic Antigen (CEA) may be tested every 3 months for the first 3 years. Normal standard for CEA varied depending on the type of laboratory testing and solution testing. A variation between 0-10 ng/dl is used as a normal guideline to detect abnormalities appearing in the body of colorectal cancer survivors.

( c) Colonoscope 3 years after surgery, then every five years.

(d) Each colorectal cancer survivor may be considered for a special investigation such as ultrasound or scan. It depends on the treating physician’s opinions for the each colorectal cancer survivor.

1.7 Cancer survivor. Researches defined the term “survivor” in various ways. Aziz (2002) defined survivors as “persons who have experienced a prolonged survival after a serious disease, or who continue to live with a life threatening condition.” Cancer survivors have been studied using qualitative and quantitative analysis in the field of psychology, one year after treatment, two years post diagnosis and more than five years after they have completed treatment. Mullan (1985) defined a cancer survivor as anyone who was diagnosed with cancer, from the time of diagnosis to the end of life.

Holland (1997) defined cancer survivors as being currently free of disease and off treatment for a minimum of one year. Little, Paul, Jordens, and Sayers (2002) defined cancer survivor as the people who have had cancer and who are living at any period after treatment, apparently free of recurrence.

Numerous studies did not determine whether the survivors were truly free of disease. Most stated that they were no longer in treatment. The consensus defines cancer survivors as a patient who is disease free for a period of five years and is considered to be in remission (Rendel, 1997).

To define the meaning of cancer survivor in this study, the consensus was considered appropriate by defining the definition of colorectal cancer survivors. Colorectal cancer survivor refers to patients who were diagnosed with colorectal cancer and have been living for five years after completing treatment apparently cancer free, determined by the treating physician’s investigations.

## 2. Fear of Cancer Recurrence

The advancement in strategies to treat colorectal cancer effectively should increase the number of the colorectal cancer survivors (Aziz, 2002). The end of cancer treatment can bring both relief and a sense of pleasure that the cancer is in remission. In the mean time, while the disease is in remission, some colorectal cancer survivors may also feel fearful that cancer may recur (Berg, 200., Mahon, 1990). Fear of cancer recurrence is a stressful situation which cancer survivors often face (Vickberg, 2003).

> *'There are nearly 10 million cancer survivors living with fear of cancer recurrence every day without any sign of cancer' (Mayo Clinic Staff, 2004).*

Fear refers to an emotional experience in anticipation of some specific danger usually accompanied by a desire to flee or fight and associated with an external real threat or danger (Quinn, 2002). Fear is a sufficiently potent, biologically driven, motivated state wherein a single salient threat guides behavior. It is a defensive response to perceive threat or the result of exposure to a single cue presented in an environment reminiscent of the original fear experience (Algase, 1999). The definition of fear is focused on known sources. Yet, some uncertainty in events or situations with an unknown source can provoke the feeling of fear (Nelson, 1996).

Fear is a function of the amount of stress that influences an individual and that individual's interpretation of the stressful situation as personally dangerous or threatening. Algase (1999) defined the critical attributes of fear are a feeling of immediate dread and being frightened from a known a specific source. Goldman (1989) stated that the perception of fear and of being threatened, associated with a sense of vulnerability and preparations for responding, characterizes either a fearful or an anxious state of mind. The sensations are identical in many people. Whether the state is called fear or anxiety depends upon the circumstances. If the response is justified by the situation, we say it is fear. Both have negative effects that can contribute to a decline in health or in harm to oneself. Fear has been found to be accompanied by uncertainty and anxiety, which may adversely affect one's health (Nelson, 1996).

It can conclude that fear is an emotional response to a specific real threat or a particular situation. It occurs through the interaction of a specific situation and it responds by a desire to flee or fight.

2.1 The Development of Fears. Fear is one of the basic emotions, which appears in human nature (Moniham, 2004). How fear develops was drawn from the study of Chaiyawat (2000). It has been found that fear was of primary importance in infancy, as when a young infant is faced with a sudden stimuli. Cognitive development occurs between the ages of 2-7 years and children develop fears from their imagination such as ghosts and natural phenomena or animals. Between the ages of 7-11 years, the most common fears were fears of danger and death, a fear of bodily injury, and fear related to social interaction such as fear of criticism and fear of punishment. Over 12 years, children develop cognitive levels, can identify logical reasoning, and are able to apply abstract concepts. They reported their common fear as fear of dependency, loss of autonomy, and changing in physical appearance (Chaiyawat, 2000).

The development of fear changes overtime. It depends on cognitive development level. Fears that remain in human beings are fear of danger, fear of physical harm and fear of death. These fears have been found at the ages of 7-11 years and continue to adulthood and through one's life span. One of the major causes of fear, which is a fear of danger, fear of physical harm, and fear of death is related to ailment, particularly a fatal ailment like cancer.

2.2 Why People Fear Cancer Recurrence? The word ‘cancer’ has been shown to have a negative connotation, arousing negative emotions of fear. The emotional response to cancer may be best described by what has been termed as death images (Bailey and Clarke, 1989). Negative attitudes toward cancer can affect an emotional response. Fear of cancer recurrences, an emotional response that has been found in cancer patients, were composed of some or all of the components (Bailey and Clarke, 1989) as follows:

(a) Fear of the medical world in general
(b) Fear of separation from a family including loss of independence
(c) Loss of social interaction
(d) Fear of treatment including pain
(e) Fear of social stigma, deformity/ mutilation
(f) Fear of disability
(g) Fear of helplessness
(h) Fear of death

Primary fears of cancer recurrence revolve around the possibility of death, further treatment particularly chemotherapy, emotional difficulty, physical difficulty such as pain, advancement of disease, and suffering of family members (Vickberg, 2003). Since cancer is perceived as the disease of death, survivors may feel they are at risk of cancer recurrence. It may be triggered by of a reminder of the disease (Holland, 1998). Survivors who believe themselves to be at risk of the cancer returning will be more likely to be emotionally aroused by their perceptions of neutral somatic stimuli. Similarly, a survivor’s experiences with cancer will have an effect on the degree of concern about a situation and the chances of the cancer resurfacing (Boyd, 1998).

Vickberg (2001) identified triggers that caused fear of recurrence in her study of women with breast cancer. The findings discovered the most common triggers were being around cancer or hearing about cancer, a related to invasive treatment experiences, feeling anxious about a doctor appointment, worried about physical symptoms presented and physical remainder of the initial cancer.

Sutherland (1992) explicated the fear of cancer can lead to the fear of cancer recurrence. It comes from many misunderstandings related to four issues as follows

(a) The cause of cancer is unknown and mysterious

(b) Cancer means pain and suffering both physical and emotionally, and usually rapidly fatal

(c) Cancer patients are often helpless, and rely heavily on the physician

(d) Current cancer treatments are complicated. The treatments have unpredictable effects and may even fail leaving the patients with pain, suffering and struggling for a cure.

Experiences of having cancer and treatment impinged on life after complete treatment. Life after treatment was perceived as a threatening situation and can lead cancer survivors to keep a constant watch for signs and symptoms of recurrence (Barrowclough,1999). Besides, cancer was perceived as destructive traumatic and past experiences of cancer treatment aroused their fear of cancer recurrence which stemmed from uncertainty and can have occurred in different situations and at different times (Varricchio and Aziz, 2000 and Vigberg, 2003).

Mishel (1988) defined uncertainty as the inability to determine the meaning of illness – related events and occurs when insufficient cues prevent the person from adequately structuring or categorizing an event, thus inhibiting the person's ability to predict outcomes adequately. According to revised model of Mishel stimuli frame referred to a characteristic of the stimuli as perceived by the individual and consists of three components: symptoms pattern, event familiarity, and event congruency. Uncertainty was likely to be presented when the person perceived inconsistency in symptoms to from a pattern, the environment is sufficiently novel and little or no congruency between expectations and experiences in the illness- treatment situation.

Living with uncertainty was a significant challenge for cancer survivor. Uncertainty is an issue during treatment, however it continues afterwards. For some, every physical change brings fear of cancer recurrence. Germino & Mishel (2002) carried out a study of uncertainty in cancer survivors; their findings indicated patients experienced uncertainty when talking about disease, choosing treatment, treatment outcomes and uncertainty related to cancer recurrence. The study investigated colorectal cancer survivors' experiences and found uncertainty after treatment related to treatment outcome and survival (Mesec and Blaž, 2004; Person and Hellstrom, 2002).
The participants felt uncertain about the future, whether cancer will return or not. The perception of having little control over the possibility of a relapse has been found in woman with breast cancer (Vickberg 2003). The experience of uncertainty has been revealed with the fear about the possibility of recurrence. DeGraves (2003) supported the notion that an uncertainty and the fear of recurrence to be intimately linked concepts in the experiences of cancer survivors and coping.

Fear of cancer recurrence remained once active treatment ends. Even though the threatening situation triggers fear, hope could survive, since hope was powerful.

While cancer survivors and their families were watching and waiting for the progression of the disease, they swung between hope and fear. Hope was an undeniable experience of cancer survivors and families. They faced with the task of hoping that cancer would be cured (DeGraves, 2003). Anything that increased the person's confidence in this domain should serve to enhance the person's overall level of hopefulness and optimism (Baum and Andersen, 2001).

Goals were vital to emotional well being. Having a "wish-for" future is one component of hope which has been defined as a "general tendency to construct and respond to the perceived future positively" (Moyniham, 2004). Emotional experience of hope could change over time. Cancer survivors living with hopelessness would have more fear of recurrence than the one who lived with hopefulness (Barraclough, 1999).

It can conclude that Barraclough (1999 ); Boyd (1998); DeGraves (2003); Holland (1998); Mesec and Blaž, (2004); Person and Hellstrom (2002); Sutherland ( 1992) and Vickberg ( 2001) deemed to support the notions about the triggering events of fear of cancer recurrence occurred in cancer survivors in the same directions. The conclusion from these studies were the triggering events associated with the negative attitude toward cancer, negative experienced about of cancer treatment, feeling uncertain and hope, thought about remainder of cancer in the body and imagined outcomes of having cancer. In addition, the study addressed timing associated with the occurrence of the fear of cancer recurrence was medical appointment and time of confronting health deviated. Fear of cancer recurrence was a function of stress it could affect the cancer survivors' quality of life and may lead to a decrease in the function of the immune system.

2.3 Effect of Fear of Cancer Recurrence. The fear of cancer recurrence was commonly found among cancer survivors. The fear of cancer recurrence may disturb physical and psychospiritual well being among cancer survivors. Some individuals were able to overcome these fears, whereas others developed symptoms of panic whenever exposed to the particular stimuli or threatening situation (Boyd, 1998). Fear of recurrence could affect a survivors' life and it was an important issue for the person with cancer (Aziz, 2002). Since fear of recurrence was located within the stress and coping paradigm, fear could affect many aspects of cancer survivors' life. Quality of life and immune function system have been studied. The details were explained as follows:

Lee- Jones and Humphris (1997) conducted a critical review of the affect of fear of cancer recurrence by employing the Leventhal' s Self Regulation Model of Illness Representation to describe a result of an illness threat that cognitive and emotional processing systems acted in parallel to inform the person how they should act. The cancer survivors may interpret normal changes as symptoms of cancer recurrence. Thus, these may lead to an emotional response to the disease as a feeling of fear. The Self Regulation Model of Illness Representation was also used to depict, and provides an understanding of why cancer survivors reaction to fear of recurrence differently. Lee- Jones and Humphris (1997) stated that it was because a person's common sense may be wrong due to personal experiences, and mass media. The possible consequences of high levels of fear of recurrence included some or all of the followings:

(a) In cases of high levels of fear of recurrence, it was likely to result in anxious preoccupation and personal checking behavior.

(b) Fear of recurrence may result in limited planning.

(c) Uncertainty about the future has been shown to be positively correlated with a state anxiety, and in some cases panic attacked.

(d) Miss interpretation of neutral bodily symptoms and the seeking of professional advice and reassurance were probable.

2.3.1 Effect of Fear of Cancer Recurrence and Immune Response. There was some evidences support the fear of recurrence being a precursor to psychological distress among cancer survivors (Lee-Jones and Hamphris, 1997; Vickberg, 2003; DeLeeuw and Ros, 2003). Studies during the past decade provided convincing evidence that psychological distress could affect the immune system (lymphocyte proliferation, NK cell activity, antibody synthesis, and cytokine production). These studies have been accomplished in human stress situation, including both experimentally produced stress and naturalistic paradigm (Rize, 2000).

Numerous studies have shown emotional distress influence the course or progression of illness or disease such as cancer (Rize, 2000). Andersen et al (1998) studied stress immune parameters in 116 breast cancers patients (Stage II, III). Intrusive and avoidance thoughts were detected and measured. The research results revealed the higher stress levels significantly produced lower NK cell activity, diminished NK cell response to IFN-γ, and decreased lymphocyte proliferation. The results suggest that stress may play a pivotal role in women with cancer, possibly indicating the more susceptibility to cancer progression or infectious complications or both. Consistent with the studies of Spiegel and Colleges (1989) reported supportive expressive group therapy to confront fear of dying and death could increase the survival of women with advanced breast cancer.

### 2.3.2 Effect of Fear of Cancer Recurrence and Quality of Life.

King (2001) studied cancer research pertaining to quality of life and identified four dimensions involving physiological well being, psychological well being, social well being and spiritual well being. Each of the four dimensions was inter-correlated and consisted of generic themes of concern for all cancer populations.

Fear of recurrence was one of the generic themes of concern. It could affect quality of life in terms of psychological well- being and associated with anxiety. Physiological well being was disrupted by fear. Survivors had trouble sleeping and eating, and had a poor appetite. Social well-being and spiritual well- being were also affected, some survivors isolated from family and friends, as well as feeling of hopelessness about the future (American Cancer Society, 2002; Dietz, Remington, Moinpour and Hamton, 2003 and Livneh , 2000). High levels of fear of cancer recurrence may lead survivors to be anxious most of the time. Even though minor illness, such as minor aches and pains in the body that may not related to cancer, the survivors may have misinterpretation of neutral bodily symptoms. Some survivors were prevented from attending follow-up care appointments (Vickberg, 2003). Besides, some were afraid to rebuild their life, because they were too scared that cancer might return. They were constantly concerned about health and in a state of hypersurveillance (Life Strong, 2004).

In conclusion, fear of cancer recurrence functioned as stress. It affected the Thai colorectal cancer survivors immune function system and quality of life. Coping with this fear may help increase immune functions, reduce risk of recurrence in cancer survivors, and enhance their quality of life. To enhance an understanding related to stress reduction, a stress and coping theory must be studied.

## 3. The Coping Process

People cope in all situations and under all conditions, not just when they were ill, so any definition must be broad based. Unfortunately, because of underlying theoretical difference, there was a significant disagreement regarding parameters to be used in defining coping. One school of thought restrict coping to those conscious and overt behaviors that foster adaptation (Meyer,1977). Others believed that the inclusion of consciousness intra-psychic process such as defense mechanism as a part of coping process was appropriate because they took the unmanageable threat out of the illness situation until the individual could deal with it realistically ( Moos and Tsu, 1977). This study coping was view as a process, which was addressed in stress and coping theories. The two theories were considered to appropriate to provide an understanding about the coping process with health threatening illness.

3.1 Theories of stress and coping. The Transactional Model of Stress and Coping, and Self Regulation: the Commonsense Model of Illness Representation stated coping as a process present as follows:

3.1.1 The Transactional Model of Stress and Coping was developed by Lazarus and Folkman (1984), the well-known theorist, provided the definition of stress emphasized the relationship between the individual and the environment that was appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. Personal characteristics as well as the nature of the environmental were considered. A precipitating event was a stimulus arising from the internal and external environment and was perceived by an individual in a specific manner. People maintain that the interaction was transactional as the person and the environment were in a dynamic and reciprocal relationship.

The Transactional Model of Stress and Coping incorporated two processes, cognitive appraisal, and coping. It regards these as critical mediators of stressful person-environment association and their and long-term outcomes. Through cognitive appraisal, a person evaluated whether an encounter with the environment is relevant to his or her well-being. There were two types of cognitive appraisals. The process of primary appraisal determined if the nature of this encounter was likely to be benign, beneficial, harmful, or a challenge. A range of personality characteristics including goals, commitments, values, and beliefs formulated this decision. Secondary appraisal involves the person identifying what, if anything could be done to overcome the situation, minimize harm, or increase the likelihood of the benefit (Lazarus and Folkman, 1984).

Lazarus and Folkman (1984) defined coping as relating to the "person's cognitive and behavioral efforts to manage (reduce, minimize, master, or tolerate) the internal and external demands of the person-environment transaction that was appraised as taxing or exceeding one's demands." Lazarus and Folkman (1984) defined coping as avoiding the problem of confounding coping with outcome. There were two preeminent types of coping, problems–focused and emotional–focused. These processes were not always conscious and readily accessible. Problem- focused strategies aimed to change the vexed person-environment relationship by acting on oneself or the environment through behaviors such as seeking information. Whereas the purpose of emotional-focus coping was to change the manner in which the relationship with the environment was attended, via vigilance or avoidance, or to change the rational meaning of the experience to ease the stress (Lazarus, 1993).

3.1.2 Self-Regulation: The Commonsense Model of Illness Representation. This Model initially emerged from a series of studies of fear communication that were conducted in the late 1960s. In the study, high-fear messages were found to be more effective in changing attitude toward a recommended health action in comparison to low-fear message. Additional data showed that action such as getting protective immunization or stop smoking occurred only when the participants exposed to the fear messages also received a second message that facilitated the development of an action plan. The realization that the health threat representation in combination with the action plan was the determining factor for subsequence coping action. It could lead to define the nature of representation. The commonsense model of illness representation developed through research by Diefenbach and Leventhal (1996)and Leventhal et al1 (1997). In the common sense model, the individual was conceptualized as an active problem solver who engages in parallel processing of two responses. Individuals were thought to regulate or minimize their health related risk and act to reduce these health threats in ways consistent with their perception of them.

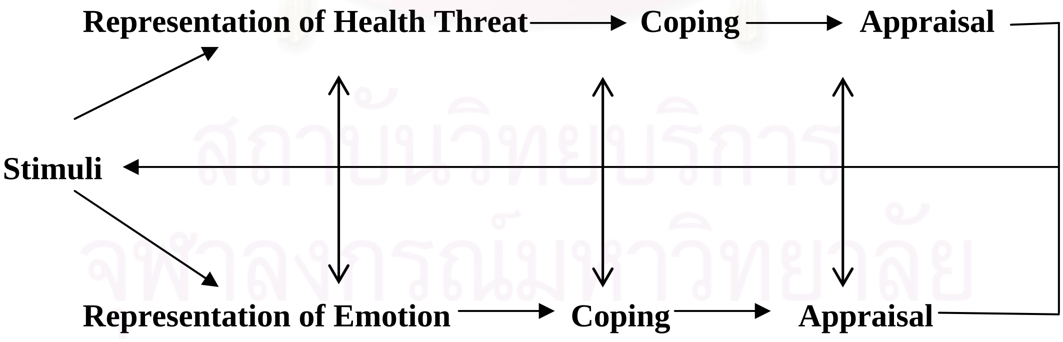

**Figure1.** Self- Regulation: The Commonsense Model of Illness Representation (Leventhal et al1,1997).

The Self-Regulation: The Commonsense Model of Illness Representation was based on four basic assumptions.

a) Active Processing. It was assumed that behavior and experience are constructed by an underlying information processing system that integrates current stimulus information with both innate and acquired coded and memories. An individual's experience of the world and its objects, emotional reaction to them, and coping reaction were created and organized by the processing system on a moment-by-moment basis.

b) Parallel Processing. Parallel processing of information involved two parallel processing pathways. One pathway was a primary conceptual, deliberative system that involved semantic knowledge (derived from culture), control, abstract processing, and procedural plan for coping with health problem. Another was primary emotional – a concrete, automatic system that evolved episode memories and perceptual, experience processing such as somatic sensations, feeling of fear, and impulsive coping responses. The two pathways interact as the individual responded to a health and illness experience. The interaction of the two pathways had important implications for the processing of symptoms and sensations. Emotions were thought, in essence, to create or influence symptom interpretation and generate additional symptoms that when incorporated in to the person's representation, influence coping and appraisal. Therefore, internal and external cued of health threat activate conceptual, reasoned efforts to understand and control the health threat. They also elicited concrete, emotional responses and efforts to control emotions (Leventhal et al, 1984).

c) Stage in Processing. The processing system was assumed to operate in three stages: representation, coping, and appraisal.

(a) Representation. The first stage created the definition or the representation of health threat and the emotion accompanying it. According to the model, both external and internal stimuli invoked illness representations, the cognitive structures by which individuals organize, analyze and interpret information and gave it meaning. Many sources of information could contribute to illness experiences, interaction with others (including significant others and health care providers), and media sources. When an individual experienced a stimulus, a process of interpretation was brought into play. The individual analyzed stimulus and sought an understandable explanation, the representation was thought to involve five distinct dimensions: identity, timeline, cause, controllability, and consequences. The identity dimension includes a disease label and the individual idea about the somatic representation of that disease. The timeline connect the stimulus to an expected time frame or expected duration of the illness. The causal component was the individual's conceptions about the probable cause. The perceived controllability of the stimulus referred to the individual conceptions about whether the stimulus or illness was responsive to self-and/or professional intervention about short and long-term outcomes of the illness in terms of personal experiences, economic hardship, or emotional upheaval.

(b) Coping. The second stage, coping involved the development and execution of response plans or procedure for coping with the representation. The categorization of a stimulus, its meaning would shape the selection and performance of coping responses may be available to the individual, one's representations determine how to cope. The selection of coping procedure was determined by conceptions about the nature of the illness threat.

(c) Appraisal. In the third stage, appraisal, the patient evaluated the efficacy of the coping strategy of primary concern was weather or not coping response had moved the individual closer or further from desired outcomes specified by the representation. Information from the appraisal stage fed back in to the prior stages. If the patient appraised a particular coping effort as being infective, then this might result in the selection of an alternative coping strategy or even a change in the representation of the illness. Thus, the model was dynamic with continuous, recursive feedback among the stages of the processing system. Each adaptive episode alters the underling memory structure and thereby changes subsequent episodes.

d). Hierarchical Processing. The processing system was thought to be hierarchical organized, ranging from a very simple concrete level of processing to a highly abstract level. The simplest level of processing included automatic mechanisms that made use of concrete stimulus features, whereas the most abstract levels made use of conceptual processes such as language, judgment, and synthesis of information.

In conclusion, the transactional model of stress and coping, and the self-regulation: the commonsense model of illness representation aimed to minimize and manage stressful life event or situation in order to maintain life's balance. An understanding stress and coping theory provided an insight for theoretical sensitivity to develop particular questions in the study.

3. 2 Coping with Cancer . Issues in coping and adaptation were addressed in oncology nursing related to the assumption that stress depended on the psychological situation that the person experiences, rather than the objective event. There was a similar interplay between a person and external reality in the determination of responses to a threat. People differ in their repertoire of coping responses. They

differ in their beliefs about what responses were helpful and their beliefs about the ability to adequately carry out certain responses (Holland, 1998).

Coping with Trajectory of the Disease: Trajectory of the disease dealt with the ways the disease progression overtime. Major divisions of the trajectory of the disease were consisted of stages that included the stage of diagnosis, the stage of therapeutic steps, the stage of the disease in remission, the stage of the disease recurrence and the stage of dying (Ladawan, 2005).

The stage of cancer diagnosis, the impact of cancer diagnosis may interfere with individuals' cognitive and cause memory impairment. The individuals with cancer may respond to cancer diagnosis by panic and shock, denial, positive fighting, accepting, depression and hopelessness (Followfield,1991). These impacts influenced thinking ability of individual to cope. However, there were studies addressed how to deal with the impact of cancer diagnosis using social support, and dealing with depression that could help individual cope with the cancer diagnosis (Aupayokin, 1991; Hog, 1995; Aguilera, 1994).

The stage of therapeutic steps, individuals with cancer may encounter physical suffering and psychological distress due to symptoms of the disease and results of treatment by surgery, radiotherapy, and chemotherapy. The stage of therapeutic steps, individuals created their hope for cure and tried to cope with the disease and treatment. The negative impacts of cancer treatment and the perception of cancer may make individuals to be more anxious about the treatment outcomes. Some individuals may lose of self-image as results of cancer treatment that could cause embarrassment and confusion (Camevalik and Reiner, 1990). These impacts may be a cause of mental exhausted and powerlessness. Yet, there were researches addressed coping in the stage of therapeutic steps by Mungkietisakul,1999 ; Pakdeechit, 1992;

Rojtinnakorn, 1993; Srimoragot and Panitrat,1997; Thongtanunam, 1998; Wongsunopparat, 1990; Wonghongkul et al, 2006 were mentioned coping in the stage of therapeutics steps and provided knowledge that could be applied to assist cancer patients in the stage of therapeutic steps.

The stage of the disease recurrence, individual with cancer may feel painful, hopelessness and despair (Camevalik and Reiner, 1990). Studies by Case (1984) and Chunlestskul (1998) addresses coping in the stage of disease recurrence and the stage of dying that could provided an understanding about how people cope. The stage of disease remission, individuals with cancer may encounter the psychological distress related to the fear of the disease recurrence and metastasis. However, little is known about coping in the stage of disease remission.

Coping is a continuous process, not limited by unfavorable resolution, and capable of constant re-evaluation and reappraisal. Coping is the crucial link between the stressor and the adaptation outcomes and is influenced by the patient's past experiences and personal resources (Parle, Jones and Maguire, 1996 and Vigberg, 2003). Coping strategies are those that strive to manage stressors using a variety of methods, including seeking and utilizing social support, objectively assessing the stressor, focusing on the positive, and behavioral and cognitive escape-avoidance approach. Survivors may use one or a combination of these strategies to create a coping process in dealing with their fears and anxieties as holistic (Nail, 2001).

Weisman (1979) studied coping in cancer patients. He viewed coping was a process which comprised of cognitive, behavior, evaluation and adaptation followed by deliberated action that specific to each coping strategy. He also concluded coping into categories of rational inquiry, mutuality , affect reversal, suppression, displacement / redirection , confront, redefine / revise, passive acceptance , impulsive, negotiate feasible alternatives, life threat , disengagement , externalize / projection , cooperative compliance and moral masochism.

A recent study by Levneh (2000) summarized the conceptual underpinned coping strategies of the recent studies. Those coping strategies could be traced the work of Folkman and Lazarus (1984) who viewed coping as a process and comprised of two distinct phrases. The phrase of appraisal was composed of primary appraisal and secondary appraisal and the phrase of coping. Almost all of strategies found in the study of Levneh (2000) were different from the study by Weisman (1979). Levneh concluded specific coping by cancer patients into eight categories as follows:

(a) Problem-focus coping. This category referred to coping efforts directed at problem resolution by focused planning and directed action taking.

(b) Information seeking. The people with cancer have often reported the existence of information seeking. It was found to be positively correlated with active behavioral coping, with increase vigor and also with better self–related psychological adjustment among cancer patients.

(c) Fighting spirit and confrontation. Fighting spirit was described as accepting the diagnosis of cancer while optimistically challenging, tackling, confronting, and recovering from cancer.

(d) Positive interpretation. This coping strategy had surfaced under a number of different and, at times, slightly variant names such as cognitive restructuring, cognitive reappraisal, growth, focuses on the positive, positive thinking and reframing. These strategies, along with seeking social support, problem solving, and self-controlling, were also adopted more by those with high threatening of cancer reoccurrence and high sense of control.

(e) Self/cognitive restraint. Personal control or the ability to use self- restraint was another strategy adopted by cancer survivors to cope with the stresses evoked by the disease.

(f) Seeking social support. Another coping strategy directed at defusing stress among people with cancer was seeking support from others. Results had generally demonstrated a positive association between seeking or reporting satisfaction with social support and decreasing emotional distress.

(g) Expressing feeling. The general population and cancer survivors use this coping strategy. They expressed or vented emotion to other. Its use has been linked to higher levels of depression and greater psychological distress.

(h) Using humor. A study found the use of humor prospectively predicted lower distress among people with cancer.

Levneh (2000) also concluded maladaptive approaches to cope with stress and crisis in cancer patient and cancer survivors. The conclusions were denial (periodically extended to include selective ignoring, threatening minimization, and suppression), wishful thinking, or fantasy, problem avoidance or escape, self criticism or self blame, social withdrawal, substance /chemical abuse or more generally behavioral disengagement and, fatalism or resignation.

In brief, copings employed by cancer patients' in the study of Weisman (1979) and Levneh (2000) were seemed to be different in terms of coping behaviors. But when re-categorized, coping behaviors in the Weisman's study, these coping behaviors can be assigned to categories which appeared in the study by Levneh (2000).

In Thailand, literature related to coping with cancer patients had been studied by Mungkietisakul (1999); Pakdeechit (1992); Rojtinnakorn (1993); Srimoragot and Panitrat (1997); Thongtanunam (1998); Wongsunopparat (1990); Wonghongkul et al, (2006). These researches focused on the work of Lazarus and Folkman (1984), and Mishel Uncertainty in Illness Scale (1984). Much of the research was cross-sectional studies and they have used self-reports and checklists. Coyne and Rcioppo (2000) ; Somerfield and McCrae (2002) argued that when coping was reduced to score, the crucial element such as timing and appropriateness may be lost. Besides, those methods were not specific thoughts, specific context, and slices of time. Lazarus and Folkman (1984) mentioned coping as a process, but the cross-sectional study would not provide an understanding of coping as a process. As a result, research related to coping as a process in Thailand was limited.

Several researches mentioned that Thai cancer patients coped by emotional- focus forms of coping and problem- focus forms of coping. They were found to be integral part in cancer patients. The coping by confronting, reconsidering ways of coping, emotional sharing, doing the best, complying with medical advices, and optimism were commonly found (Hanucharurnkul and Intrarasombut, 1988). In addition, coping in cervical cancer patients receiving radiotherapy were emotional sharing and counseling with other, reconsidering coping behaviors, seeking information, confrontive and complying with regimen (Kritsanapan, 1989). An ethnographic study by Kestsumpum (1993) in 20 cancer patients revealed the patients coped by praying, vowing, and practicing meditation. Whilst Karnchanajaree (1993) discovered coping in hematology cancer patients, and found they coped by complying with medical regimen, emotional sharing with other, seeking information, situational acceptance, thought distract, crying, using alternative medicine, self- encouragement, healthy life style, treatment information avoidance, self introjections, and self projection. Besides, Chunlestskul (1997) revealed that breast cancer patients after treatment dealt with cancer recurrence by understanding the situation and depending on self, openly sharing the truth, self- need limits, releasing, deflecting thought, developing self-determination, complying with medical regimen, finding self- value, and accepting the truth . Surakul ( 2001) disclosed six coping strategies employed by cancer patients as, seeking and finding treatment information from many sources , building up physical strength and will power to get rid of cancer , resignation, relying on their merit and good deeds, believing in their doctor, keeping in secrets, being afraid of being hated. Singtiphun (2001) investigated a complementary therapy approach. “Cheewajit” was sought as a means to manage and deal with physiological suffering and psychological distress among cancer patients.

Rattanajarana (2005) studied coping in colorectal cancer patient with colostomy. The study was underpinned by Moos and Schaefer conceptual model of the stress, and coping process. The findings indicated the participants used religious practices, positive thinking, accepting colostomy, thought stopping, learning how to live with colostomy, making a wish, hope, and social support. Religious beliefs such as the “Law of Karma,” as well as a variety of religious activities such as Buddhist chanting and making merit, listening to the monk’s sermon were used as important coping strategies to deal with negative emotion and to deal with the fear of death. Pittayapan (1999) concluded stress and coping related to cancer patients in Thailand to five major coping strategies. These were optimism, social support, spiritual beliefs, situational control, and passive acceptance.

In conclusion, studies related to coping, which were commonly found in Thai cancer patients could be categorized as positive thought/optimistic, spiritual which mainly involved religious beliefs, confrontive, seeking information, complying with medical regimen, thought distraction, social support, seeking complementary therapy, passive acceptance, and avoidance. Obviously, the research findings about coping in several cancer researches were presented as themes. Even though coping was viewed as a process, existing, literature has shown less evidence to support this concept. Furthermore, almost all of the studies were conducted during hospitalization and receiving treatment, with less focused on cancer survivors. Thus, studies focused on coping as a process used by cancer survivors in Thailand were limited and were given less attention.

3.3 Coping with Fear of Cancer Recurrence. Fear of cancer recurrence functions as a stress, which needs coping to balance fear. Several studies focused on coping with fear and addressed in western research. Fear of recurrence has been found in common and became a subject to investigate. A study of breast cancer survivors found that 60-90% reported their concerns about the possibility of cancer recurrence as one of the most common and prevailing fears (Schover, 1995). Vickberg (2003) had similar findings in a study involving breast cancer survivors reporting the fear of recurrence as their major concern. Lubeck and Litwin (2003) examined fear of cancer recurrence in patients undergoing definitive treatment for prostate cancer, with results from CaPSURE (Cancer of the Prostate Strategic Urologic Research Endeavor). The study revealed that only general health and mental health were important predictors of fear of cancer recurrence. Mesec and Blaž (2004); Person and Hellstrom (2002) discovered uncertainty related to treatment outcomes in colorectal cancer patients which related associated with the fear of the cancer recurrence. A study by Ness, Holmes, Klein, Greene and Dittus (1998), Northhouse et al (2002) studied the concern of colorectal cancer patients and spouses. They reported their greatest concern was fear of recurrence and lifestyles were changed in eighty percent of the survivors as result of their illness.

Vickberg (2001) had studied coping with the fear of cancer recurrence. She examined experiences of coping with fear of cancer recurrence among women with breast cancer and results indicated a range of strategies to cope with their fear of recurrence. The use of social support was the most commonly found. Some women went to support groups or sought support from other cancer survivors. Other women turned to friends or family for support, or used professional sources of support such as therapist and social workers. Behavioral coping strategies were also studied. Distraction was used by women who provided detailed descriptions on their level of effort to keep busy with their daily routine, focus on work, and distracted herself by reading or watching TV. Some women coped by practicing healthy behaviors such as exercising or getting mammograms. Women, who commented that going to church, reading the Bible, and praying to ease their fears, mentioned religion.

Psychological coping among breast cancer survivors was conducted by Baum (2003). The main objective of the study is to enhance the quality of life and mental health and reduce psychological distress particularly, the fear of recurrence. The trial for breast cancer survivors at the end of treatment evaluated a one-on-one psychotherapeutic intervention combining education, intensive coping skill, problem solving training, and lifestyle modification assistance. Positive outcomes, including, an increase in one’s perception of the quality of life and mental health. The results provided evidence of beneficial effects of the program of the fear of cancer recurrence.

Deleeuw and Ros (2003) investigated experiences of head neck cancer patients after treatment of 1-3 years. It has been shown that head neck cancer patients experienced fear of recurrence after treatment, which was associated with uncertainty and anxiety, and there was a need for appropriate intervention to assist cancer patients who feared of recurrence and uncertainty surrounding the effectiveness of treatment. Deleeuw and Ros (2003) considered counseling to apply for head neck cancer survivors. Comprehensive counseling was employed in the study to alleviate emotional distress, uncertainty, and fear of cancer recurrence. It was reported comprehensive counseling could improve the head neck cancer survivors' quality of life.

Several recent researches in Thailand related to colorectal cancer patients focused on symptoms distress and symptoms management that appeared during treatment by surgery, particularly receiving treatment by colostomy, chemotherapy, and radiotherapy. A psychological distress has been studied in colorectal patients and concerns about treatment outcomes and survival and experienced uncertainty with the illness after treatment (Jirajarus,1996; Lumdubwong, 2001; Pongyart, 2000 ; Rattanajarana, 2005; Rojtinakorn, 1993; Singtiphun, 2001). These experiences associated with the fear of cancer recurrence (DeLeeuw and Ros, 2003; Germino and Mishel, 2002; Nelson, 1996; Vickberg, 2003; Warner and Frost, 2000). Nevertheless, information of coping process with the fear of cancer recurrence in Thai colorectal cancer survivors was limited and given less attention.

In summary, researches about coping with fear of cancer recurrence were social support, thought distraction, practicing healthy behaviors and religious activities were found in common. Western studies developed a program of coping with fear of cancer recurrence by problem solving training and comprehensive counseling.

The development of the program needs knowledge about the coping process to explain how people think and react to the specific situation. Thus, to help Thai colorectal cancer coping with fear of cancer recurrence, coping process is needed for further investigation.

3.4 Factors Influence Coping in Thai Cancer Patients. In general, factors that affect coping in cancer patients had been studied. Cohen and Welch, (2000) defined attitudes toward disease, personal beliefs and cultures are important factors that affect coping mechanism. Robinson (1971) stated that the individual responded to coping with fear differently depending on personality, background, and culture. There were different cultural beliefs about the cause of illness that could lead to different coping strategies (Cameron, 1987 cited in Pongthavornkamol, 2000). Baider, Andritsch, Ever-Hadani, Hoffman and Samoniggh ( 2003) confirmed the different cultural beliefs affected coping styles in women with breast cancer of Graz, Austria and Jerusalem, Israel. Besides, Cohen and Wills (1985) determined social support affects the ability to cope for releasing physical and psychological distress. Aguilera and Messick (1982) stated that factors that can enhance coping and adaptation were related to the perception of the event, situational support, and coping mechanism. In addition, the patient’s experiences and personal resources influenced coping (Parle, Jones and Maguire, 1996, Vigberg, 2003).

In Thailand, nursing knowledge related to stress and coping in cancer research was developed continuously. The study of coping with colorectal cancer and the creation of the colostomy in the Thai context by Ratanajarana (2005) indicated that religious beliefs and practice, characteristics of Thais and relationship in Thai family, the level of acceptance/resignation, physical health, and knowledge about colorectal cancer influence coping in cancer patients. Religious beliefs are an important factor that the cancer patients use to cope with psychological problems (Tongprateep, 2000). Chobchai (1993). Hanucharurnkul (1994) described attitude toward cancer, information and social support influenced coping in cancer patients. The beliefs of traditional medicine or alternative therapy influenced coping strategy (Subchareon, 1995 and Singtiphun, 2001). The recent researches could be explicated factors effecting coping in Thai cancer patients and could be concluded to attitudes towards cancer, personal beliefs, religion beliefs, alternative medicine, and social support. These factors are presented as follows:

(a ) Attitude Towards Cancer**.** Attitude is a learned implicit anticipatory response gained from experiences. Attitude is a filter through which people perceive reality, and attitude is the outcome of behaviors (Cohen and Welch, 2000). Fishbein and Ajzen ( 1975) believed that attitudes are formed as the corresponding of beliefs . Attitude toward cancer was developed through the outcome of the disease. The outcome of having cancer always provides negative attitudes towards people, which can be best described by what have been term death images (Bailey and Clarke, 1989). In Thailand, most people believe cancer is an incurable disease (Hanucharurnkul, 1994). In the past, the attitude toward cancer and treatment could be viewed as cancer as a fatal disease and a rapid death. Negative perspectives toward cancer could produce depression, a feeling of hopelessness and anxiety (Srimoragot and Boontong, 1994). Burns (1984) described when people perceived a diagnosis with cancer, they felt hopelessness, despair, stigma, and waiting for death. This belief occurred in all societies and cultures. In contrast, positive attitude toward cancer inspired the individuals to create hope, and a will to live. It connects the body and mind that leads to recovery from the disease (Jirajarus, 1996). Attitudes and beliefs are intimately related, it could be stated that attitude toward cancer influences how an individual with cancer copes.

(b) The Personal Beliefs**.** Personal beliefs influence coping mechanism found in the individual with cancer. The personal beliefs involved Thai culture and religion, and alternative medicine. These personal beliefs underpinned the decision how the individual with cancer think and how the individual with cancer decided to cope.

Culture and Religion. Personal beliefs effect stress and coping. Thai people are subjected to factors, which affect the use of copping strategies. Factors relating to the beliefs of Thais are based on Buddhism, which is their main religion. Buddhism influences how Thais feel about all aspects of life from birth to death. They believe in reincarnation. Buddhist believes that people must be born repeatedly. The form of the rebirth depends on how well they did in their past life. Besides, this belief is linked to the Law of Karma. The Law of Karma explains that every act has a certain result, which cannot be avoided. Good deeds will receive good results (Rattanajarana, 2005). Burnard and Naiyapatana (2004) stated that Thais believed that their illness is caused by bad karma, so they make merit to make good karma. There were evidences that Thai people believed in Law of Karma and life after death, some believed cancer is caused of as a result of bad karma in their previous life according to the Buddhist religion (Burnard and Naiyapatana ,2004; Klausner,1993; Ratanajarana, 2005; and Tongprateep, 2000). These beliefs influenced their thoughts, having cancer is caused by karma, and having cancer reappearance is determined by previous karma. Coping by doing good deeds are thought to be strategies to decrease the chance of cancer recurrence that effect and lessens the fear of recurrence. The belief in Law of karma and doing good deed appears in the Buddhist religion that permeates through Thais. In the midst of suffering, Buddhists believe a key factor to help reduce this suffering is when the Lord Buddha said “the end of suffering is within the suffering; in the cycle of rebirth, there is also Nivarna; in agitation there is emptiness; where ever suffering occurs, it must be stopped there.” Distress that occurs in the mind must stop in the mind. If it is held in the mind, it must be released from the mind. Thus, allowing the mind to abstain from its own distress. The mind will clearly see the truth (Amaro, 1995). The teaching of the Lord of Buddha focuses mainly on suffering and how to deal with this suffering and encourages people to face and accept facts in life. Most Thai people are Buddhists, they manifest their religiosity by a belief in Dharma, Law of Karma, the belief in life after death, religious practices, merit making, merit sharing, gratitude and caring among family members. Buddhists applied Dharma to reduce their anxiety and depression and increase their will to live (Physansuthidetch,1988). Spiritual comfort was a result of spiritual coping by practicing religious activities.

In western societies where the majority are Christian, they cope with their fear of cancer recurrence by openly sharing their emotions and concerns, using humor, looking for positive aspect , finding benefits in life (Baum, 2003; DeLeeuw and Ros, 2003; National Medical Research Council USA, 2003; Oncolink, 2004; Stanton, 2003; and Vickberg, 2001). Using religion is one of the most commonly used strategies in the coping with cancer (Hert, 1989). The study by Vickberg (2001) mentioned coping with fear of cancer recurrence in women with breast cancer by going to church, reading the Bible and praying to ease their fear of cancer recurrence. Religion plays a part of spirituality, which influences the way people cope to comfort their mind. Spirituality can be viewed as faith and a religious belief system. Religion is a part of a person’s spiritual makeup. Religious rituals are how people manifest their religiosity and religious beliefs (Villagomeza, 2005). Barraclough (1999) studied an active religious belief tended to go along with good adaptation to illness, though personal spiritual development was probably more relevant than adherence to a formalized religious. Many people derive comfort of mind from their faith in religion.

A cancer patient’s fear of cancer recurrence stems from uncertainty (Vickberg, 2001). The consequences of spiritual coping with the uncertainty of life is lined in the hope and making a peaceful mind (Tongprateep, 2000). Chobchai (1993) mentions the aging patients with cancer used spiritual coping by wanting to recover from the disease, being healthy, wishing to die peacefully, wishing to see their son become a monk. The study also determined sources of hope and strength were in religion. Thus, religious beliefs and spirituality are closely related and affected how Thais coped with the fear of cancer recurrence.

In conclusion, existing knowledge relating to the personal beliefs, culture and religion are intimately linked together and the Buddhist religion is a key factor for Thais to cope. Because the religious beliefs are permeated in all elements of Thai culture. The Law of Karma, life after death, doing good deeds was believed to influence coping process with the fear of cancer recurrence. The awareness of Thai culture is an important aspect for finding interpretation. An understanding of the cultural context can contribute to a more complete picture of the coping process that the Thai colorectal cancer survivors used.

Alternative Medicine. The beliefs of alternative medicine influence coping tactics, which were normally found in cancer patients and survivors. Alternative medicine is a combination of both eastern and western medicine, which is characterized by holistic care and is considered consistent with modern medical practices. Holistic care views the body, spirit and soul as a whole, emphasizes a natural approach to self-care, and prevents more than a symptomatic or a disease-oriented approach (Boon, 1998). The belief in alternative medicine involves traditional medicine, herbs, manual therapy or massage and the application of Buddhist worships and rituals to mental health, traditional midwifery, traditional practice, and natural therapy (Subcharoen,1995). Thai traditional medicines are methods of practice to care for Thai people's health and to cure their disease and illness in the way that are congruent with the Thai way of life and culture. Use of herbal medicine occurred because of trial and error in the traditional medicine of their ancestors (Wongtes, 2000).

The belief of Cheewajit. Cheewajit is commonly employed among cancer populations. Singtipphun (2001) wrote about Cheewajit in her study. Cheewajit health care emphasizes holistic care through living natural life, in harmony with nature in order to achieve good health, and happiness in society. Following the Cheewajit principles, one should live a normal life, consume minimally cooked, preferably crude, cereal and vegetables, rich in nutrients, and avoid processed foods. Cheewajit also emphasizes the simple and pure way of life, views life in a natural way and targets a tranquil state of mind. The concept of Cheewajit evolves around living in harmony with nature such as living a balanced and simple life, living for excellent physical and mental health, living a kind, generous, and giving life, to make a better and just society. Cheewajit emphasized consumption of unprocessed locally available food, unpolished grain, and chemical free food. Holistic way of life depends upon proper adaptation to the nature.

The belief of meditation. Meditation is the intentional self-regulation of concentration. It enhances concentration and awareness as an individual focuses systematically and intentionally on particular aspects of the inner or outer experiences. It is a refined and systematic way to pay attention on purpose, in the present moment, and be non-judgmental. There are two large generic categories of meditation practices. Those emphasize concentration and emphasize mindfulness (Holland, 1998). There were studies related to the effect of meditation and found that it slows body metabolism, decreases stress, and changes brain function, promotes relaxation of the body and mind to another deep state of rest which differs from sleep or a dreaming state. Psychological tests among people who have trained to mediate revealed stress reduction benefits not only during meditation and during improvements in various aspects of personality, memory, and intellect. In biological aspects, lactic acid and cortisol levels, which reflect the bodies stress, were reduced (Holland, 1989 and Singtipphun, 2001).

(c) Social Support. Basically , social support plays a vital role in coping. The different level in social support resources can have an important impact on patients' sense of well- being when confronting the challenge of psychological distress. Social support is usually thought of in terms of spousal support or support from friends and family but other social interactions may be relevant in social support (Holland, 1989). Diekmann (1988) reported on the result of the project "I Can Cope" and found social support could assist the individual coping with cancer and adapting to suffering caused by cancer. Bocanegra (1992) deemed to support Diekmann (1988) that the individual with cancer who participated in a social support group could cope and adapt to living with cancer. Besides, Mishel and Braden (1987) explicated social support helped the individual with cancer created confidence to face uncertainty and coped in daily life with positive attitude and life satisfaction.

The reasons behind providing social support varied depending on background of the individual. Buddhists believe helping each other is perceived as doing good deeds (Ratanajarana, 2005). Buddha's words mentioned an express sense of gratitude to their parents and someone who has done good things for them is doing good deeds. Therefore, Thais need to do a good deed by taking care of sick parents, or sometimes someone who supports them in order to express their gratitude. Expressing their gratitude to parents or someone in return is always performed in context of Thai culture (Burnard and Naiyapatana, 2004). As a result, Thai cancer survivors may receive support from family members, both physical and psychological support. This support is one of several factors that help survivors cope with their fear of cancer recurrence.

In conclusion, life after cancer treatment of colorectal cancer survivors who confronted with the fear of cancer recurrence always sought ways to minimize this threatening life situation. Fear stemmed from uncertainty, the cancer survivors were unable to determine the meaning of future illness. High levels of fear of cancer reappearance lead to psychological distress that may affect the decreasing immune function response and increasing higher risk of cancer recurrence. The quality of life among Thai colorectal cancer survivors living with high levels of fear of recurrence may diminish. Thus, it is needed for appropriate coping. Whereas coping with fear of recurrence among Thai colorectal cancer survivor has been less well researched. Most researches focused on cancer patients, which were conducted during hospitalization and treatment process. This study mainly focuses on the coping process with the fear of cancer recurrence in Thai context. The reasons lie in existing literature relating to fear of recurrence and coping as follows:

1 The difference of beliefs can lead to different coping strategies. Colorectal cancer survivors who have different beliefs about cause of cancer and treatment may respond to fear of recurrence differently. From this perspective, beliefs

that influenced coping, used by Thais colorectal cancer survivors may vary in each person and lead to different coping process.

2 The majority of recent researches used self-report and checklists, which coping was reduced to scores, the critical element such as timing and appropriateness may be lost. Besides, the coping methods were not specific thoughts, specific context, and slices of time. Thus, understanding the coping as a process, which is dynamic and limited.

3 Based on the findings of the coping in several qualitative cancer researches in Thailand are presented as themes. Obviously, a few researches attempted to investigate fear of cancer recurrence and coping process, particularly in Thai colorectal cancer survivors. To assist Thai colorectal cancer survivors manage fear of cancer recurrence without an awareness of their coping process, it may lead to ineffective and be harmful to survivors.

4 The development of the program to help Thai colorectal cancer cope with fear of cancer recurrence needs knowledge about the coping process to explain how people think and react to the specific situation. Thus, coping process with the fear of cancer recurrence is needed for further investigation.

In summary, fear of cancer recurrence is a function of stress. It affects immune function system and diminishes the Thai colorectal cancer survivors' quality of life. However, there were limited in knowledge of coping process, providing nursing care needs knowledge to enable nurse to understand and help to give nurses insight into the different circumstances, times, thoughts , and behaviors in a specific context in dealing with the fear of cancer that required different solutions.

# CHAPTER III

# METHODOLOGY

In this study, qualitative grounded theory approach was employed. The objectives of this study were to explain how the Thai colorectal cancer survivors cope with their fear of cancer recurrence and to generate the explanatory model that described the coping process.  This chapter described the research design, the settings, the data collection method, the procedure and the data analysis respectively.

## Research Design

This study identified the research question “How did the Thai colorectal cancer survivors perform the coping process for their fear of cancer recurrence?”  To answer the research question, the grounded theory methodology was an appropriate method because it allowed discovering the process of coping that the Thai colorectal cancer survivors employed to cope with their fear of cancer recurrence. It also was a means to generate the model that allowed an understanding of the phenomena of coping with the fear of cancer recurrence and identifying the processes describing the characteristics of a particular situation according to the participants’ perspective (Chenitz and Swanson, 1986). Data were analyzed systematically by a constant comparative method.  Concepts were developed to form categories. Analysis was interplayed between the researcher and the data (Strauss and Corbin, 1998).  A set of well-developed concepts together constituted an integrated to a model. The model could be described and understood as the holistic view of a coping process for the fear of cancer recurrence that the Thai colorectal cancer survivors employed.

## The Setting

The research setting in this study was one of the ten excellences cancer centers, which is located in suburban Bangkok. This hospital provides medical services for general treatment as well as a specific treatment for all cancer types. Since this hospital is located in the suburbs, most of the cancer patients came from the area surrounding this hospital. Many of the cancer patients were referred to the cancer center for more complicated treatment. There were approximately 1,200 new cases reported per year and they visited Outpatient Department of this hospital and were referred to the cancer center. In addition, there were more than 10,000 time services provided for cancer treatment and caring for known cases of cancer. According to the report from the cancer center of this hospital, colon cancer was the second cancer type, which was commonly found. The number of new cases reported of colorectal cancer was around 100 cases in 2004, 120 cases in 2005 and increased to 140 cases in 2006.

This hospital provided a protocol for a Gold Standard for Colorectal Cancer Treatment as outlined by the National Comprehensive Cancer Network (NCCN) Guideline (2002). The treatment procedure was mainly depended on stages of the disease. Basic treatments were surgery, chemotherapy and radiotherapy. The most common treatment by surgery procedure was the right and left half colectomy for colon cancer and colostomy for anal cancer. Chemotherapy for colorectal treatment was 5-FU, oxaliplatin, leucoverin and xeloda. These were used as a basis. Radiotherapy was given before and after treatment by surgery in conjunction with chemotherapy. It depended on the stage of the disease. After complete colorectal cancer treatment, the colorectal cancer survivors had to follow the follow-up guidelines, which the treating physician mutually planned, with cancer survivors and their families. The colorectal cancer survivors visited the treating physician at the Outpatient Surgical and Radiotherapy Department between service hours of 08.00- 12.00 am, from Monday to Friday. Follow-up care was provided by medical appointment. The appointments varied since it depended on the time after colorectal cancer treatment, the stage of the disease and the cancer patients' conditions. Blood test of Cell Embryonic Antigen (CEA) was done 3 days before appointments to investigate the progression of the disease.

## The Method of the Study

Grounded theory was employed as a research methodology. It was based on Strauss and Corbin's (1998) conducting method and data analysis. The method and procedure were presented respectively.

## Study Participants

The study of the participants experiences related to the process of coping with fear of cancer recurrence was completed by data obtained that could explain a holistic view of how the Thai colorectal cancer survivors coped with their fear of cancer recurrence. The saturated data was justified when there was no new data emerged from the incoming information from the participants in the study. The saturated data were gained by the data collection of 22 colorectal cancer survivors.

## Inclusion Criteria of Colorectal Cancer Survivors

The colorectal cancer survivors were eligible for the study were identified cancer free by the treating physician after completing the colorectal cancer treatment.

1. Cancer survivors recognized diagnosis of colorectal cancer.
2. Recognized fear of cancer recurrence
3. Complete all kinds of colorectal cancer treatment.
4. Age more than 20 years.
5. Well -communicated.
6. Speak, read and write Thai language.
7. Agree to participate in the study.

## Recruitment Procedure

After the permission to conduct the process from the selected hospital, the recruitment procedure began with the researcher self-introduction to the head nurses and staff nurses at the Outpatient Surgical and Radiotherapy Department. The staff nurses were informed of the objectives of the study. The participants who visited the physician by medical appointment between 08-12 am, Monday to Friday, September 2005- June 2006 were sought for eligibility. The treating physician identified the participants were cancer free for the researcher. After the participants' permission to participate in the study, study of the participants' history of illness and treatment procedure from medical record were conducted, self- introduction to participants was done to create a good relationship. Study the participants' medical record was helpful to decide how to select participants in theoretical sampling. Recruitment the participant followed by inclusion criteria.

**Protection of Human Subject**

This study was conducted and respected the protection of human rights. The present research proposal was submitted to the Institute of Review Board on Human Subjects, Chulalongkorn University for ethical approval. Then the approved research proposal was submitted to the Institute of Review Board on Human Subjects of the selected hospital (Appendix A). When the committees approved that, there were no risks for participants and there were no amendments, then the research process was performed. The principal means for ensuring the rights of the participants was by an informed consent form. The participants who agreed to participate were asked to sign a consent form (Appendix B). All participants were informed of the purposes of the study, and confidentiality of the study, as the right of the participants. To maintain confidentiality, participants' names were not attached to the data, code number was given to each participant, instead of their real name, and reference to organization was avoided. Specific name in the acknowledgement was not directed links with the research environment. Audiotapes and transcriptions, records, and data were placed in security lockers and stored separately from identifying codes. Data were destroyed after the study was accomplished. The process of data destruction by computer was done by deleting all information in all records.

To minimize potential harm of the participants, the consent form stated the participants could withdraw from the study at any point of time without jeopardizing the survivor's care. Participants could refuse and cease giving data at their discretion. If participants felt uncomfortable during the interview, the researcher would prepare sources for psychological support. If the participants felt stressful, the researcher would ask for counseling from psychologist, and if appropriate treatment were needed, a psychiatrist would assist these participants. The appointment time was made before an in-depth interview began. To confirm availability and to provide opportunity to cancel, the researcher made a phone call before appointment times.

**Data Collection Method**

The data collection started from September 2005 to June 2006. The data were collected by searching personal data from medical records, in-depth interviews, and observations accompanied by field notes, during interviews data were recorded by audiotape. Field notes were done during and after interviews in order to record the participants' reaction while being interviewed, to detect for emotional expression and to remind some issue that the researcher wanted to evaluate. In addition, field notes help the researcher to track for interesting relevant issues to the study such as home environment and family members. Fields notes helped describe assumptions about what was heard or observed, and the researcher felt personal narrative about what during a particular encounter. The details of data collection method were presented as follows:

1. The researcher informed of purposes of the study to staff nurses. Staff nurses provided information about the participants who recognized colorectal cancer diagnosis. The treating physician determined the participants who were diagnosed cancer free. The participants who met inclusion criteria were asked for permission to search for personal data by signing a consent form. Then personal data of each participant were searched from medical records pertaining to age, sex, education, marital status, occupation, and religion, history of illness, stage of colorectal cancer diagnosis, previous treatment and the result of Cell Embryonic Antigen (CEA).

2. In-depth interview were conducted as the method of data collection. Some of the participants allowed the researcher to perform semi-structured interviews,

which took place in a private room in the cancer center. Some colorectal cancer survivors allowed the researcher to an in-depth interview at the participants' home. It made participants feel free to answer the questions. The researcher encouraged the participants to elaborate their experiences relating to how they coped with their fear of cancer recurrence. The interviews ranged from about 40 - 90 minutes. The average interview was 65 minutes. There were six participants who were in-depth interviewed twice. The rest of 16 the participants were in-depth interviewed once.

The interview guideline was prepared before the interviews. The semi structure interviews were divided into two parts, the first part of the semi-structured interview focused on demographic data. Data were obtained from medical records before the interview began. The second section consisted of guidelines for the semi-structured interviews (Appendix C). It involved questions about how they coped with their fear of cancer recurrence and factors influencing coping activities. Probing questions were asked in order to find out more specific information relating to the changing process that the colorectal cancer survivor used to deal with their fear of cancer recurrence.

3. Audiotapes were used during in-depth interviews to assure accuracy of information. Each interview record was transcribed verbatim and was recorded by computer. The accuracy of data could be checked and rechecked by tape recorder comparing data recorded from the tape recorder to the computer.

## Data Analysis

Data analysis was a systematic method to arrange all data resources relevant to the study, which included interviews, transcriptions, field notes, and memos in order to give the researcher's understanding to what was going on in the study that the researcher could present to others. In this study, the researcher analyzed data accompanied by the peer debriefing committee, dissertation advisor and an experienced qualitative research grounded theorist throughout the process of conducting the research.

The researcher employed the constant comparative approach of analysis throughout the research process until core categories developed. Data were analyzed by using the constant comparative method wherein each line, phrase, sentence, and paragraph from the transcribed interviews, field notes and incident to incident were read to classify and decide what concepts the data reflected and to code the data. Each code was compared to all other codes. The researcher compared the similarities, differences, and general patterns. This process also helped the researcher to develop questions to direct theoretical sampling. Two analytic procedures, making comparisons and asking questions were used. Memos and diagrams were done in conjunction with the coding process.

## Coding Process

During a grounded theory investigation, the process of data collection, coding, and analysis occurred simultaneously. After collecting data by field notes and in-depth interviews, data were transcribed by the researcher, open coding, axial coding, and selective coding were done. They were presented as follows:

The researcher conducted open coding by breaking the data down, reading the transcriptions of each participant’s line-by-line and paragraph by paragraph, identifying types of specific events, activities, and behaviors. Examining, comparing, conceptualizing and categorizing data were done. Categorizing requires the use of the constant comparative approach in the treatment of data. The researcher coded the data, compared them with other data, and assigned the data to clusters or categories according to its properties. Categories were simply code data that clustered and could result from the condensing of the open coding. In open coding, initial concepts were formed and developed into categories that reflected concepts that are more abstract. The researcher tried to discover concepts that emerged as possible as it could be then compared with new incidents to discover the relationships. During open coding, the researcher wrote memos to keep track of emerging categories, stimulate further coding, which served as a means for integrating theory. The categories that emerged from open coding provided a basis for axial coding.

The researcher conducted an axial coding after open coding. It’s the process of relating categories to their subcategories, termed “axial” because coding occurs around the axis of categories at the level of properties and dimension to form more precise and complete explanations about phenomena (Strauss and Corbin, 1998). It was a set of procedures whereby the data was put back together in new ways after coding, by making connections between categories.

The researcher conducted the selective coding after creating axial coding. Selective coding was the process of integrating and refining the model. It was the process of selecting the core variable which systematically related to other categories, validating those relationships, and filling in categories that further require refinement and development. The core variable has characteristics that occur frequently in the data. It pertains to maximum variations and analyses (Strauss & Corbin, 1998). It links various data. Because it is central, it explains much of the variation in all the data.

## Theoretical Sampling

Theoretical sampling is data gathering driven by concepts derived from the evolving theory and based on the concept of making comparisons whose purpose is go to places, people, or events that would maximize opportunities to discover variation among concepts and to identify categories and properties and dimensions (Strauss and Corbin, 1998). The researcher began to conduct a theoretical sampling by

1. The researcher used method of purposive sampling and considered that participants of the study were the colorectal cancer survivors who could provide information related to the coping with the fear of cancer recurrence.

2. Inclusion criteria was used as a means to select participants by asking a staff nurse about the colorectal cancer survivors who recognized the diagnosis of colorectal cancer and a physician determined no evidence of cancer recurrence. These participants were believed to have experiences in coping with the fear of cancer recurrence.

3. A researcher began asking questions to find the experiences relating to fear of cancer recurrence “Tell me what was your major concern after colorectal cancer treatment?” If fear of cancer recurrence appeared then the grand tour question was asked “Tell me what did you do to deal with your fear of cancer recurrence?” Probing questions were asked that allowed the participants to elaborate on the experience of coping with the fear of cancer recurrence.

4. Data obtained from all sources were analyzed. Data analysis were done to identify concepts emerged.

5. Memos were also used in conjunction with the coding process, written for further coding, questioning, verifying working hypotheses, and storage of all codes. Writing memos were performed throughout the whole data analysis process.

6. After the clear abstract concepts were developed, the researcher identified working hypothesizes and validated these working hypothesizes through questions to find out the variation of what concepts emerged, the relationship among categories and property.

7 This concepts emerged were used to guide further data collection to elaborate the properties and relationships among categories by the mean of the theoretical statement. Data were collected according to working hypothesis.

8. The researcher sought for personal data, which focused on the heterogeneous sampling through the variation by age, sex, education, marital status, occupation, history of illness, stage of colorectal cancer diagnosis, and previous treatment.

9. Data collection was done and analyzed at the same time and these continued until there were no new data emerging from the analysis. . The working hypothesizes were verified and synthesized to generate a model.

**Trustworthiness.**

Trustworthiness was used in qualitative research instead of reliability and validity, which was used in quantitative research. In grounded theory, Glaser and Strauss (1967) mentioned credibility of study findings. Glaser and Strauss (1967) emphasized that the proper criteria of judging the credibility of grounded theory must be based on strategies used for collecting, coding, and presenting data when generating a theory and the way in which it was presented.

This study, trustworthiness was approved in all of the research process. Transcribed verbatim, field notes, memos, coding process, and category creation were done by the researcher and could be used as an audit trail.

### Credibility

Credibility measures how vivid and faithful the description of the phenomena was (Oumtanee, 2001). The criteria of the credibility was prolonged and varied in field experience, time sampling, and interview technique, establishing authority of the researcher, structural coherence, referential adequacy, field journal, triangulation, peer examination, and dense description (Guba and Lincoln, 1985).

1. Credibility of this study created through the selective participants. The participants who had experience in coping with the fear of cancer recurrence and varies in history of illness, sex, education, occupation, and treatment procedure.

2. The researcher built trust in the colorectal cancer survivors before the research process of collecting data began by creating a rapport and relationship with the participants. This allowed the participants to feel free in providing information.

3. The researcher summarized the research findings according to empirical evidence and emerging data, by using triangulation in data collection methods involving in-depth interviews, field notes, and memos. Credibility was achieved by the triangulation method with the peer debriefing.

4. This study increases credibility by using prolonged engagements of 8 months with the colorectal cancer survivors, researcher recruiting and interviewing twice with the six key informants.

### Credibility of the Researcher as an Instrument

The abilities of a researcher as an instrument to conduct a qualitative approach in grounded theory were emphasized. Since the abilities of the researcher came from being able to use inductive and deductive thinking by classifying, analyzing, and interpreting data. The researcher prepared to enhance the abilities in conducting grounded theory, regarding the area of the study:

1. The researcher attended three credits of qualitative research in nursing, at the Nursing Faculty, Chulalongkorn University.

2. The researcher attended qualitative classes for 32 hours, which covered grounded theory approach, at the Faculty of Nursing, Chulalongkorn University.

3. The researcher participated in workshop of qualitative research, led by Ass. Prof. Mary Ann Jezewski and experienced data interpretation related to grounded theory.

4. The researcher attended Oncology class at Peter MacCallum Cancer Research Center, University of Melbourne, and experienced interviews and interpretations of cancer patients and cancer survivors' experiences.

5. The researcher investigated the grounded theory approach under the supervision of Prof. Sanchia Aranda and Dr. Meinir Krishmasamy, a grounded theorist in the Oncology Nursing Field at Peter MacCallum Cancer Research Center, University of Melbourne, Victoria, Australia.

In conclusion, grounded theory was employed in this study since it allowed discovering the process of coping with the fear of cancer recurrence. Using grounded theory was also a mean to generate the model that could explain and enable nurse to understand the coping process. Data analysis based on Strauss and Corbin (1998). The researcher identified inclusion criteria and the participants were recruited followed by these criteria. Data were collected by in-depth interview and from medical records after the participants signing consent form. Theoretical sampling was conducted when there were clear abstract concepts emerged. Working hypothesizes were created based on categories/ concepts emerged to verify the relationship, variation of emerging concepts, property and dimension. The data were saturated when collected from the 22 colorectal cancer survivors. Constant comparative method was used along the research process. A set of well-developed concepts were employed to create a model that could explain the coping process with the fear of cancer recurrence.

# CHAPTER IV

# FINDINGS

This study aimed to explain how the Thai colorectal cancer survivors coped with their fear of cancer recurrence and to generate the explanatory model that explained how the Thai colorectal cancer survivors performed the coping process for their fear of cancer recurrence. The results of the study generated “The Explanatory Model of Living with Controllable Fear of Cancer Recurrence.” The stage of change in the model displayed and explained a basic psychological process based on the Thai colorectal cancer survivors’ perspective. This chapter also described the demographic data related to personal information and characteristics respectively.

## Demographic Data

Data obtained were saturated by data collection from the twenty-two Thai colorectal cancer survivors that can explained how the Thai colorectal cancer survivors coped with their fear of cancer recurrence as holistic views. The participants were composed of 12 females and 10 males. Ages of the participants ranged from 38 – 73 years. The most were over 60 years old. The youngest participant was 38 years old with a history of chronic constipation. Five participants resided in Pathoomthanee Province. Another five of them resided in Nonthaburi Province. The rest of 12 participants resided in suburbs around Bangkok.

The educational level varied from illiterate to a master degree. Six of the participants received bachelor degrees, four of them had completed professional certificates, seven of them had completed high school, three of them had completed elementary school, which in the past was the compulsory education level, and one had completed grade 4.  Only one of them had completed a master’s degree and another one was illiterate.

Marital status of the participants was reported, one was single, one was a widow, and the rest of the twenty participants were married.  A spouse always played a vital role in providing emotional support and tangible support. All of them were Buddhists. Their occupations were reported, six participants were working as government official, six were housewives, five of them were merchants, and the rest were retired.

**Table 3** Personal information

| Characteristic | Frequency |
|---|---|
| Age group | |
| 35-50 years | 3 |
| 51-60 years | 8 |
| More than 60 years | 11 |
| Home setting | |
| Pathoomthanee province | 5 |
| Nonthaburi province | 5 |
| Suburban around Bangkok | 12 |
| Level of education attainment | |
| Illiterate | 1 |
| Elementary school | 3 |
| High school | 7 |
| Professional certificated | 4 |
| Bachelor degree | 6 |
| Master degree | 1 |
| Current occupation | |
| Government official | 6 |
| Housewives | 6 |
| Merchants | 5 |
| Retired | 5 |
| Buddhist religion | 22 |

Characteristic of the participants associated with colorectal cancer have been reported about the stages of disease, seven of the participants were diagnosed with CRC stage 2, eight of the participants were stage 3, and the rest of seven participants were stage 4. Eight participants received treatment by colectomy with radiotherapy. Six of the participants received treatment by colectomy with radiotherapy and chemotherapy. Four of the participants received treatment by colostomy with chemotherapy. The rest of the four participants received treatment by colostomy with radiotherapy and chemotherapy.

Post treatment varied from one to more than sixteen years. The most commonly found for cancer survivors was two to five years. The participants reported their co morbidities and underlying diseases were hypertension, hyperlipidemea, diabetes mellitus with cataract, heart disease, back pain, and benign prostatic hypertrophy with cerebrovascular disease. All of the participants continued to treat comorbidities with the treating physician and simultaneously kept medical appointments with their oncologists. Obviously, the most commonly comorbidities found among the 22 colorectal cancer survivors were hyperlipidemea, diabetes mellitus, hypertension, and heart disease.

**Table 4.** Characteristics of the participants

| **Characteristic** | **Frequency** |
|---|---|
| Stage of diagnosis | |
| Stage 2 | 7 |
| Stage 3 | 8 |
| Stage 4 | 7 |
| Treatment procedure | |
| Colectomy with radiotherapy | 8 |
| Colectomy with radiotherapy and chemotherapy | 6 |
| Colostomy with chemotherapy | 4 |
| Colostomy with radiotherapy and chemotherapy | 4 |
| Duration after treatment / being cancer survivors | |
| 1-2 years | 9 |
| 2 -5 years | 10 |
| More than 5 years | 3 |
| Comorbidities | |
| No | 3 |
| Yes | 19 |
| Hyperlipidemea | 6 |
| Osteoporosis | 1 |
| Diabetes mellitus with cataract | 3 |
| Hypertension with heart disease | 8 |
| Benign prostatic hypertrophy with cerebrovascular disease | 1 |

## Finding: A Coping Process with Fear of Cancer Recurrence.

Finding a coping process with fear of cancer recurrence illustrated the stage of changes which involved the behavioral and psychological efforts that Thai colorectal cancer survivors used to lessen, and control the fear of cancer recurrence.

Fear of cancer recurrence was an emotion experienced in anticipation of some specific real threat relating to confronting the cancer returning . Fear of cancer recurrence was perceived as a life-threatening situation among Thai colorectal cancer survivors. Since cancer was recognized as the disease of death and difficult to treat. It may recur anytime. These thoughts may trigger the survivors mind at anytime. Therefore, the Thai colorectal cancer survivors tried to find ways to lessen their fear. This study discovered the process of coping with fear of cancer recurrence among 22 Thai colorectal cancer survivors. The coping process was composed of six stages of change. It began with recognizing fear, obtaining information, accepting self-responsibility, building physical strength, developing psychological strength and the final stage was decreasing fear. The relationship of the development of the coping process is illustrated in figure 2.

**Figure 2: The Explanatory Model of Living with Controllable Fear of Cancer Recurrence**

## Finding: The Explanatory Model of Living with Controllable Fear of Cancer Recurrence.

The Explanatory model of living with controllable fear of cancer recurrence has shown that the coping process evolved overtime. The model emerged from the Thai colorectal cancer survivors’ perspective in dealing with fear of cancer recurrence. The finding showed how each stage was developed to produce a coping process to decrease and control the fear of cancer recurrence. The first stage in the model began with recognizing fear. Since the participants recognized the fear of cancer recurrence, they sought information to understand more about cancer, its cause, and the ways to prevent recurrence. As a result, the stage of recognizing fear moves to the stage of obtaining information. The knowledge gained from the stage of obtaining information made the participants more understandable about cancer, which influences the thought of the participants to remind them in preventing cancer recurrence, and an intention to do one's best. The knowledge gain allowed the stage of obtaining information moved to the stage of accepting self-responsibility. The stage of accepting self-responsibility also influence an intention of the participants to deliberately performed to increase physical strength and psychological strength. Thus, after the colorectal cancer survivors developed the stage of accepting self-responsibility, the stages of building physical strength and developing psychological strength appeared consecutively. Both stages occurred simultaneously and were influenced by personal beliefs and social support. The three stages of accepting self-responsibility, building physical strength, and developing psychological strength were intimately linked together and brought into the stage of decreasing fear. When triggering events occurred in every day life, they could make change the stage of decreasing fear moved to recognizing fear again. The coping process of the fear of cancer recurrence moved on continuously to decrease their fear. Therefore, coping with the fear of cancer recurrence was a dynamic. Six stages of change were elaborated as follows:

### Stage 1: Recognizing Fear

Recognizing fear was described as an emotional experience where one anticipated the possibility of a cancer relapse after complete colorectal cancer treatment. The study of the colorectal cancer experiences revealed fear of cancer recurrence was surrounded by four types of fear. The four types of fear were fear of cancer spreading, fear of suffering, fear of death and fear of being a burden.

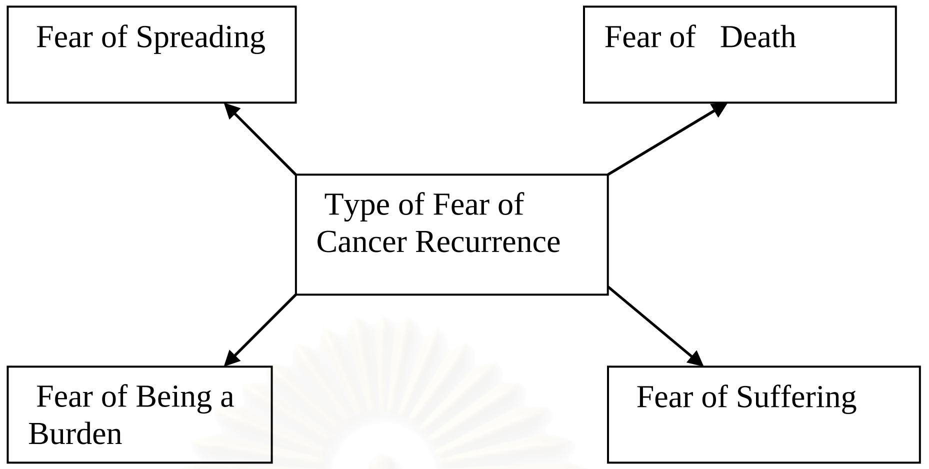

**Figure 3:** Types of Fear of Cancer Recurrence

Even though the participants received colorectal cancer treatment completely, they perceived the chance of cancer recurrence and felt fearful all the time. At this stage, the levels of fear went high. The study discovered 4 types fear revolved around fear of cancer recurrence. Fear of spreading was the fear of cancer spreading to other parts of the body or organs such as the liver or the lungs. Fear of death was the fear that if cancer recurred , the participants would die in a short period of time. Fear of being a burden was the fear that if cancer recurred, they would become a family burden. Fear of suffering was the fear that if cancer recurred, they would receive complicated painful treatment. In this study, it was found some participants had a high level of fear, they were too fearful to comprehend what they have to deal with their fear, but at low levels of fear, the participants may be sufficiently motivated to deal with their fear. The study found the levels of fear and coping behaviors were correlated. It was important to note that high levels of fear of cancer recurrence could diminish coping abilities. The study found some of the participants informed of they were too fearful about cancer recurrence. As a result, they had limit abilities to deal with this fear. They were doing nothing and felt hopeless.

The statements reflected high levels of fear of cancer recurrence.

> *“..... I am afraid of cancer recurrence so much. When I think of it, I had poor appetite and I could not eat. I could not sleep, just kept thinking about its recurrence. I felt irritable. I could not do anything to stop this fear. Sometime it was like I was hopeless.” # 2 p3 / 121-124*

The statements from the participants reflected their feelings relating to the four types of fear of cancer recurrence: fear of spreading, fear of death, fear of being burden and fear of suffering as follows:

> *“….. I am afraid of cancer spreading to other organs, and I am scared of a cancer relapse. Particularly if cancer spreads to the liver it will cause death quickly. I don’t want to get sick at this time; I want to take care of my children.” # 14 p5/ 171-173*

> *“.....I think I cannot live longer. I’m afraid of dying, particularly of a cancer recurrence. I know that cancer can spread”. “I cannot stop my thoughts about the disease. When you ask about thinking of the disease or not, I get cancer, no I never forget, I don’t know when or where it spreads particularly to the liver and lungs. But if it recurs, I am afraid I may become a family burden. ...... I am scared of its relapse because, when I know that I had to receive treatment by chemo.. it was like... I was tortured, I felt anxious. Oh... I thought of my hair. I might have falling hair..... The nurse told me that I might be allergic to the chemo. After seven days of receiving chemo last time, I was very sick; I threw up so much and had a bad smelling of everything. Just only see chemo room I feel like I am throwing up suddenly.” # 8 p5 / 183-192/ p16/573-579*

> *".....I may not live longer until retirement because doctor told me while waiting for treatment by surgery that after receiving treatment I must wait and see treatment outcome within five years. If there is nothing wrong , It will be safe ,but I cannot make sure that I can live until that period , whether I will be alive or not, I am scared to die of its recurrence. " # 4 p 7/ 114-119*

> *".....If I have cancer again at the age of 67, my body may not stand for treatment by operation. If it returns to me again I will die certainly. It means death and death." # 16 p7 / 243-246*

> *".....Since I was diagnosed with cancer, and received treatment by operation, doctor informed of my cancer was cured 100% but I realized that I'm getting cancer , I cannot cease thinking about I have no cancer and cancer will never come back. No... I never. But, as a matter of fact, form the deepest thought it may be somewhere in my body." #3 p2/43-48*

## Stage 2: Obtaining Information

After the colorectal cancer survivors recognized their fear of cancer recurrence they tried to seek for more information. Information obtained influenced accepting self-responsibility, building physical strength and psychological strength, which would be presented in the following stages.

Obtaining information was actions of the participants to search for information about cancer, cause of cancer and ways to prevent recurrence in order to gain more knowledge and understanding about cancer. Information obtained affected the colorectal cancer survivor's thought about how to perform in preventing cancer recurrence. It could occur when the participants were unsatisfied with their conditions; information obtained would provide choices to cope. It also provided ways that could be used as guideline to prevent cancer recurrence. As results, obtaining information influenced the stage of accepting self-responsibility, building physical strength and developing psychological strength. Information could be obtained by actively searching and passively researching. The details were presented as follows:

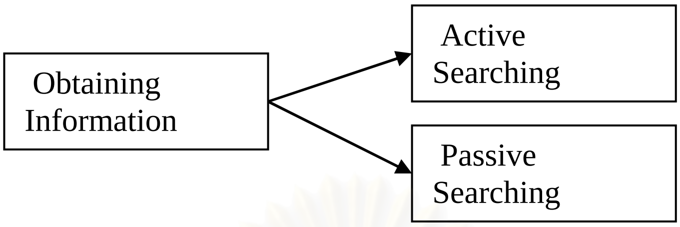

**Figure 4:** Sub-categories of Obtaining Information

**2.1 Active Searching**: Active searching was defined as an action of the colorectal cancer survivors in an attempt to seek for more information by using several methods, which included reading books, talking to friends, other cancer survivors and consulting physicians. The colorectal cancer survivors realized that they had the fear of cancer recurrence so they tried to actively searching for information to gain more knowledge about cancer and the way to prevent cancer recurrence. Information obtained can be resources for the colorectal cancer survivors to consider ways to prevent recurrence, which would perform afterwards.

> *“.....I read a book written by Dr. S. He said he got cancer in nasal cavity then he tried to go on a hunger strike. He said he did not eat meat any more. Even though, in early stage of diagnosis with cancer he did not eat egg. After that, he cared himself by avoiding meat, he ate fruit juice, many kinds of bean, and red unpolished rice. Because, meat might impetus cancer recurrence. I decided to follow his way.” # 6 p 9/249-255*

> *“.....I read a book of Balavee and Cheewajit which focus on Natural therapy. The books say protein from meat of animal may create cancer. I agree with the book says. I participated in cancer meeting. Several methods to prevent recurrence concerned about avoiding eating meat. ” # 4 p6 /116-11*

> “**.....***I try to read about colon cancer. In M... University library, I went there with my friend, there is a book talks about colon cancer that cancer will be delayed in growing because of vitamin C or sour taste fruit. I did not stop self study and continue to learn more and more......... I went to visit Dr. S. and talk about Cheewajit and vegetarian food. I wanted to prevent a chance of cancer recurrence. Then I followed his advice.” # 9 p9/358-365*

> “**......***Because, I have cancer.....It is like cancer can spread to other parts of the body. I searched paper and found research about colon cancer. It said colon cancer is different in types. Many types of cancer spread quickly whereas some types are stable, and not spread. ” # 8 p26 / 676-680*

> *“.....I’ve read a book written by Dr. S about Cheewajitt. I took care of myself like the book said. Dr. S said cancer can grow if I eat without control..... I read more to know how to live without recurrence.... Another book was written by what Colonel, he is a soldier. I could not remember his name. He was an expert oncologist. The book said I must exercise and practicing meditation then cancer will not relapse. I did follow the books said.” # 6 p8 / 228-229*

> *“.....Since, I was diagnosed with cancer, I read books, whatever the book said is good I always follow ... at that time Dr. S was popular about Cheewajit. I ate Cheewajit food. I bought some food and let my servant did it for me. I turn to eat unpolished rice I focused on this point. # 8 p19 / 468-472*

**2.2 Passive Searching**: Passive searching referred to actions of the colorectal cancer survivors to gain for information about cancer by receiving information from family members and neighbors and their experiences. The colorectal cancer survivors realized that they fear of cancer recurrence and perceived a chance to recur. Some of the colorectal cancer survivors received more information about the disease and the way to prevent cancer recurrence from husbands, sons, and daughters, and their neighbors. Some of them recalled for their experiences to help them prolong their life. The information obtained provided ways to survive with less chance to recur.

The information could influence the colorectal cancer survivors' thought and actions perform to prevent cancer recurrence.

> *"..... Some of my neighbors, she is about 80-90 years old, she was sick of cancer. Her treating physician said, she could live only for a year. Surprisingly, until now she can survive for 30 years. Right now she cannot walk, but sits in a wheelchair. Physician said, he helped prolong her life. She said she only received radiotherapy accompanied by keeping medical appointment continuously and used Thai herbs. She never left the physician and the physician never left her. I want to be like her. I have to follow her ways."*
> *# 2 p17 / 474-480*

> *"..... My husband told me, there were evidences about some cancer survivors who visited physician and thought about the disease recovery. Later, they refused to contact physician. As a result, it returned ceaselessly." # 12 p11/509-512*

> *".....I received information from my friend. When I went out with her, she always suggested me to do after her, she ate Cheewajit, no fish source, and she went to folk medicine for cancer treatment..." # 14 p4/119-123*

**Stage 3: Accepting Self-Responsibility.**

The stage of accepting self-responsibility referred to thoughts and intentions of the colorectal cancer survivors to take responsibility themselves involving self-reminding and doing one's best. This stage appeared consecutively after the colorectal cancer survivors obtained information about cancer and ways to prevent recurrence. Because they feared of its relapse, they had thoughts and intentions to prevent cancer recurrence in order to achieve their goal of living with cancer free life. The details about the stage of accepting self-responsibility were presented as follows:

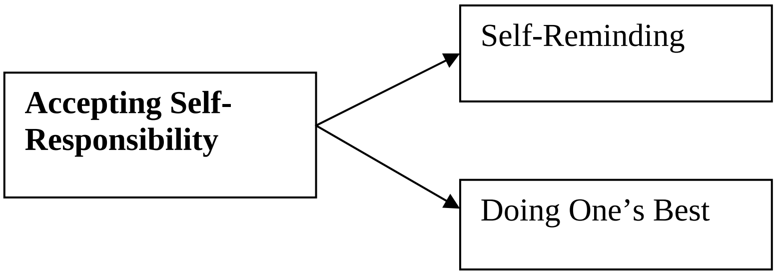

**Figure 5** Subcategories of Accepting Self- Responsibility

**3.1 Self- Reminding:** Self- reminding referred to a thought of the colorectal cancer survivors to warn themselves strictly to preventing cancer recurrence. Some of the colorectal cancer survivors tried to remind themselves in every day life to consider their daily living habits, about the food they eat and what the benefits and harmful from food. They tried to warn themselves by avoiding stress and trying to maintain health status. Self-reminding was a way of the participants performed to meet their goals of preventing a cancer recurrence. The quotations from the colorectal cancer survivors expressed a self-reminding in preventing cancer recurrence**.**

> *"..... I warn myself if there is some kind of food I am not sure to eat I should avoid. I must consider before eat because it may harm to me. It may make cancer recur." # 14 p2 / 75-76*

> *".....I am always aware of myself to control food all the time, rest and relax as possible as I can , not being worried so much about the disease recurrence, and merit making, praying and practicing meditation so often. I always remind myself that I have a chance to recur." # 9 p8/ 307-309*

> *".....I must not be careless. I must remember ... keeping my body strong. Do not think of everything is normal, the disease may progress too much." # 7 p 9 /232-235*

> *“..... I should concern what kind of food is useful to eat, which food is not suitable I would not eat. Preserve food or pickle is not good for health, I will not eat. Fresh vegetable is not good as well. Because, it may contain insecticide.” # 7 p8 /271-275*

**3.2. Doing One’s Best:** Doing one’s best referred to the colorectal cancer survivors intended to do their best in preventing cancer recurrence. Doing one’s best influences the degree of an intention of the colorectal cancer survivors to prevent cancer recurrence, which involved the stage of building physical strength and the stage of developing psychological strength. The study of the colorectal cancer experiences revealed that they tried to do their best in keeping on developing a peaceful mind and making the body strong.

> *“.....I must attempt to do some thing to stop cancer spread out. If I make my mind relax, and make my body strong, the whole body will produce something which can prevent cancer return.”*
> *# 6 p9 /237-43.*

> *“...... I must try to control food, exercise, and take good care of my body. I tried hard to keep my body strong all the time. If my body is strong, it can prevent cancer relapse.” # 16 p2 /42-44*

> *“..... I must make my body strong. It is the best way to prevent cancer recurrence. I tried hard to do my best.” # 1 p8/ 286-290*

> *“**.....**I tried to take care of myself. I decided how to make my body strong by running every evening, walking, and doing exercise by Cheevajit pattern and drink Cheevajit juice every day and I still do.” # 8 p9 /228-233*

> *“..... I am afraid. It is because this disease is difficult to treat, I must try to prevent it recurrence as possible as I can.” # 18 p10 /391-392*

## Stage 4: Building Physical Strength

Building physical strength was actions of the colorectal cancer survivors performed to create and increase the body strength by the means of changing their habits, committing to modern medicine, using alternative medicine, and self-monitoring. After the participants in the study obtained information about cancer and cause of recurrence, and the ways to prevent recurrence accompanied by the beliefs that determined the weakening of the body could cause the disease recurrence, they realized that cancer recurrence could be inhibited by building physical strength. Therefore, the colorectal cancer survivors attempt to build their body strength to against the chance of recurrence.  The details of building physical strength were presented as follows:

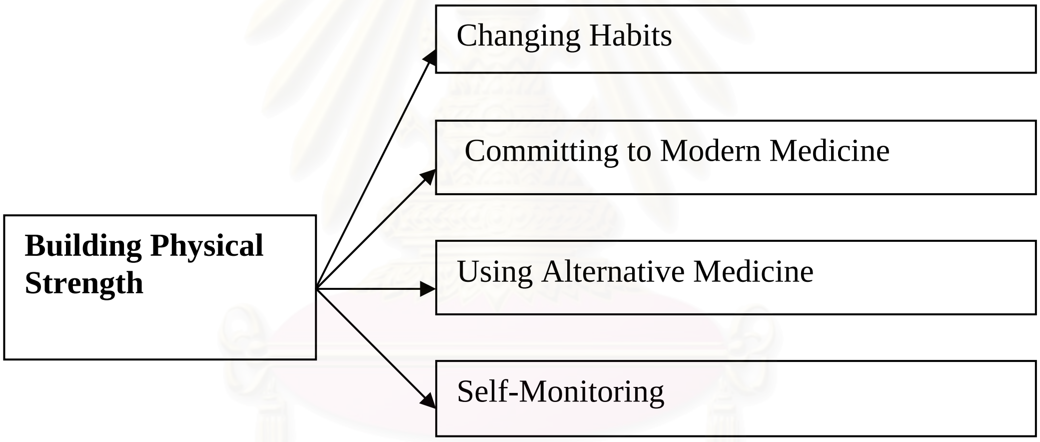

**Figure 6** Sub-categories of  Building Physical Strength

### 4. 1 Changing Habits

Changing habits referred to the changes of previous habits of the colorectal cancer survivors to the new habits. Since the colorectal cancer survivors perceived the risk of recurrence related to previous daily routine habits which involved eating, smoking, drinking, exercising, resting and sleeping  that  they used to conduct before they were diagnosed with colorectal cancer, they dealt with this life threatening situation by the mean of changing habits to become physically stronger. They tried to change their previous habits to new habits in order to prevent the risk of cancer recurrence. Changing habits involved avoid eating some kind of foods, stopped smoking, and drinking, increasing more exercising, sufficiency resting and sleeping. The reasons of changing habits were influenced by information they gained and their beliefs. They believed cause of cancer recurrence related to food, smoking, drinking, and lack of exercising, insufficiency resting, and sleeping.

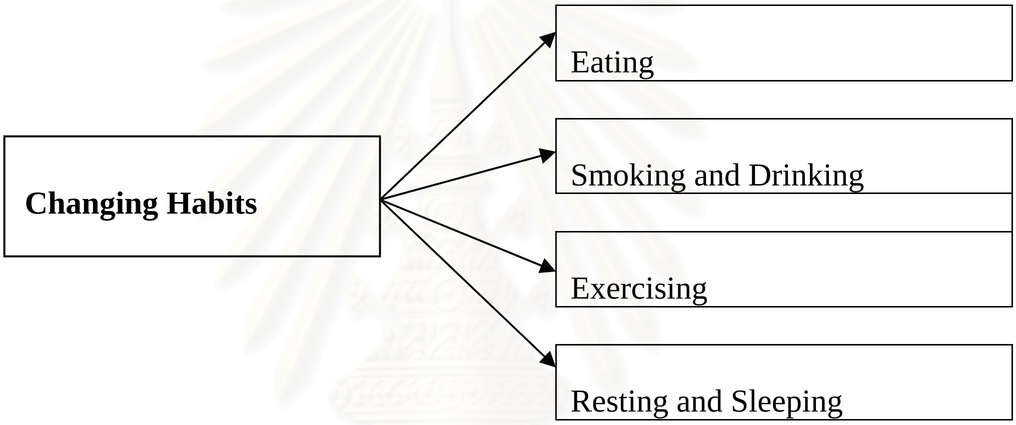

**Figure 7** Sub-categories of Changing Habits

**4.1.1. Eating:** The participants gained knowledge about how to prevent cancer recurrence by changing their previous eating habits to a new eating habit that would prevent cancer recurrence and create body strength. Many of the colorectal cancer survivors described the cause of colorectal cancer came from food they ate and weakness of their body. The beliefs about the cause of cancer recurrence related to food, such as toxin in food and ‘Taboo Food’. Some of the colorectal cancer survivors believed about some kinds of food could prevent cancer recurrence such as food that contained vitamin and antioxidant. The colorectal cancer survivors paid more attention to deliberately selecting different types of food to eat. Moreover, they were careful to buy, prepare, cook, and store food. Almost all of them told about some kinds of food such as burnt food, fried food or broiled food contained some substance that could trigger cancer recurrence. Therefore they changed their previous eating habits to new habits by avoid eating those kinds of food. Many of colorectal cancer survivors knew about how to adjust food after cancer treatment. Some of them recognized about organic food that provide health benefits by increasing physical strength and decreasing chance to recur, thus they changed from normal eating to eating organic food. They explained more about changing from eating without concerning benefit from food to concentrate more about its benefit. Some changed from normal food to eat macrobiotic diets, the vegetarian diet, and food supplements. The quotations from the participants confirmed their changing eating habits.

> *“..... Now I ate organic food (her own words) as possible as I can. But if I cannot find it, I would eat vegetable from the market, I bought vegetable in its season and made it clean, boiled it before ate it.” # 3 p4 /105-108*

> *“.....I did not eat many kinds of food I ever ate. Because it may cause cancer to relapse.” # 7 p11 /275*

> *“....At present time, I do not eat meat, pork, chicken or poultry. I eat only fish, some kind of seafood, and shrimp. Mostly, each meal, I eat less meat or pork. Sometimes I eat vegetarian. Since I have begun to receive cancer treatment until now. I keep eating like this because I can do it and I feel my body is better and cleaner. But I did not drink milk.......After I read more, I recognized vitamin C and antioxidant food can help increase resistance inside the body.. You know ... orange and carrot are rich in antioxidant, it can prevent cancer relapse. I bought a dozen of orange and carrot I eat until my palms turned yellow.”# 9 p2 /64-77*

> *“..... After cancer treatment, I always have carrot juice and fruit for breakfast. I haven’t eaten white rice since I have cancer, but whole wheat breads not much.” # 8 p6 / 183-192*

> *“.....  I eat more vegetable than before.  I prepare it by myself I must be careful and wash it until I can make sure that it was cleaned.” # 10 p 4 / 164-153*

> *“..I   did not eat white rice for years, after I have cancer. I eat unpolished rice instead.  It’s good for me and makes me feel strong and I feel good when I eat vegetable too.”  # 6 p10 / 270-271*

**4.1.2 Smoking and Drinking:** Smoking and drinking habits were the changed that the colorectal cancer survivors intend to prevent the chance of cancer recurrence by stop smoking and drinking.  Some of the colorectal cancer survivors described that they used to smoke cigarettes and drank heavily.  After they were diagnosed with colorectal cancer and received modern treatment, their knowledge, and beliefs that cigarettes and alcohol could be a cause of colorectal cancer recurrence. To prevent the risk of cancer recurrence and restore healthy life style, they stopped smoking cigarettes and drinking alcohol. The quotations of the participants stated as follows:

> *“.....  In the past, I smoked cigarette heavily since I was 19 until 50 years old. I have smoked cigarette for 30 years. Smoking may cause cancer recurrence.  After treatment I gave up smoking since then.” # 3 p9 /341-349*

> *“.....Like myself, I  used to  smoke  heavily and   drank a lot but now I  do  not drink  and give  up smoking   since the year 2002, because if  I drink and smoke,  cancer may recur.”*
> *# 16 p9 /206-209*

> *“.....I gave up smoking, and gave up drinking after I had cancer.”*
> *# 18  p4 / 136-137*

> *“.....I changed my behaviors. I gave up smoking and drinking since I was diagnosed with cancer.”  # 22 p4 /167-170*

**4.1.3 Exercising :** Changing exercising habit was the changed from previous exercising habit to do more exercise for healthier life style. Based on the information and beliefs about the cause of cancer recurrence related to the weakness of the body, the participants found ways to prevent cancer recurrence by the mean of increasing the body strength, which would make the body healthier by exercising. The colorectal cancer survivors described, that they attempted to exercise as often as they could. Some of the colorectal cancer survivors seldom did exercise before they got sick of colorectal cancer. Since, they were afraid of cancer recurrence, they changed exercising habit to do exercises more often. Some of colorectal cancer survivors did exercise as daily routine accompanied by eating nourishing food, and used alternative medicine according to their beliefs about way to prevent cancer recurrence. Many patterns of exercise were used such as YO-KA and Cheewajit pattern to make the body stronger than before. The colorectal cancer survivors kept exercising continuously every day because they perceived the benefit from exercise. The participants' quotations addressed changing exercise habits as follows:

> *"..... Before I was sick of colorectal cancer, I did not do exercise. However, right now, I do exercise every day. I concerned about my body if I was weak the disease may return. I try to keep my body strong, I am exercise addiction. Every evening I go out for a walk or sometime run. I do exercise by Cheewajit pattern." # 8 p 9 /228-235*

> *".....The disease may return to me if I have low energy and I could not against the disease. Therefore, every day evening I always do exercise. I walk around the house and do YO-KA and whenever I want to. I take serious to do exercise after I get better around more than a year." # 18 p7/ 245-249*

> *"...Every evening, as a part of my life, I keep my body stronger by walking along with praying Ai Ti Pi So....along the way I walked simultaneously." # 14 p14 /561-562*

> *".....I analyzed myself, my body is important. I must maintain my body strength. Not only kill the disease but also restore body strength in order to prepare to fight the disease. I do it by exercise accompanied by eat nourishing food." # 7 p11 /324-331*

**4.1.4 Resting and Sleeping:** Changing resting and sleeping habit was the changed that occurred after the participants perceived of rest and sleep affect the physical strength. Rest and sleep were considered an important behavior to restore physical strength. Many of the colorectal cancer survivors described their life style before they were diagnosed with colorectal cancer that they did not pay attention to the rest and sleep enough. Some of them went to bed very late. Many of them could not sleep well during the night and always got up many times. They learnt that rest and sleep were very important for life after colorectal cancer treatment because insufficient rest and sleep may result in the weakening of the body and may allow cancer recur. Finally, many of the colorectal cancer survivors tried to adjust their rest and sleep pattern so they got sufficient rest and sleep in every day life. The quotations of the participants show their experiences about changing rest and sleep habits.

> *"..... Before I was sick of this disease, I could not sleep well..... After cancer treatment, doctor said, I have to sleep enough to rehab my body. If my body is strong, cancer may not recur. I went to bed 4-5 pm and get up around 5-6 o'clock; I only woke up 1 time during the night." # 22 p3 /113-119*

> *".....I think rest and sleep are important to prevent disease recurrence, now I tried to sleep more than 5 hours per day. I must tried hard because sometime before I was sick I could not sleep , I was worried about my sleeping, if I could not sleep . I would feel fatigue, cheerless, not feel fresh up." # 5 p7 / 316-326*

> *"..... As I know about this disease, I should rest and sleep sufficiently. Yet, I was careless. I always went to bed late at least 5 p.m. Not more than this time. Asking do I sleep during daytime before ... no I never. Now I did. " # 21 p15 / 430-444*

> *".....Some night I could not sleep. Even though I tried. I never took tranquilizer. Nevertheless, after cancer treatment when I could not sleep then I took it after that I could sleep well. If I can sleep well, I will be healthy and cancer may not recur." # 3 p8 / 317-324*

### 4. 2 Committing to Modern Medicine

Committing to modern medicine was actions of the participants related to keeping medical appointment and following advice. Keeping medical appointment was composed of seeing physician as usual and following up regularly. Following advices was composed of strictly complying with recommendation and taking medication. Since the colorectal cancer survivors recognized fear of cancer recurrence, they believed that modern medical treatment was an effective tactic to cure cancer. They entrusted and believed of modern medicine as the main treatment because, information they gained about the effective ways to prevent cancer recurrence was determined by the results of modern medical treatment. Modern medicine was believed to enable to cure the disease and help prolong their life. It was important to note that keeping medical appointments and following advice allowed the colorectal cancer survivors to perceive their physical strength.

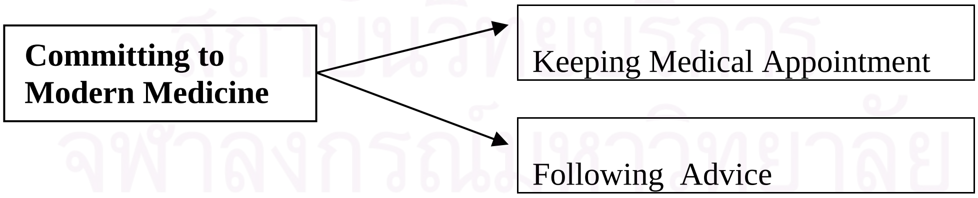

**Figure 8**: Sub-categories of Committing to Modern Medicine

**4.2.1. Keeping Medical Appointments:** Keeping medical appointment was actions of the participants related to seeing physician as usual according to medical appointment and trying to follow up regularly. Due to the colorectal cancer survivors entrusted their physician and believed that physicians could help investigate physical abnormalities, they stated that they never missed medical appointments and tried to adhere to medical appointments every time. Keeping medical appointment could also determine the colorectal cancer survivors' health status.

**Seeing the Physician as Usual** was described by the participants. They performed to visit physician as usual when appointment time was determined after their treatment completed. Even though, the colorectal cancer survivors were told that their disease had been cured, they continued to see a physician as often as they could. This was because they perceived information from other cancer survivors about cancer recurrence may happen if not seeing physician as usual and they believed that cancer might recur without warning sign. Surprisingly, even though the physician confirmed that the disease had been in remission stage, the colorectal cancer survivors still needed to see the physician as usual.

**Following up Regularly** was described. The colorectal cancer survivors performed to visit the physician for following up regularly to investigate their health status. Based on the perception of the colorectal cancer survivors, following up regularly was the way for detection of health deviation or physical abnormality. The quotations of the colorectal cancer survivors confirmed that they kept medical appointment, following up regularly, and visiting physician as usual as follows:

> *".....Form the past to present, I never miss medical appointment. Since, the appointment was 1 month, then 2 months. When time*

> *came I never miss.  I followed the medical appointment. I knew it was very good for me. Because doctor could help me and examine my body." # 4 p 9 / 222-226*
> *"..... Visiting doctor according to medical appointment was important for me. So far, I never miss medical appointment. When due date came I visit physician as usual. I never miss.... After visiting physician, I could know how my physical condition was." # 11 p 2 / 54-59*

> *".....I always  visit doctor follow by the medical appointment. Whenever doctor made appointment, I would go. I visited him every time I never missed I did like this continuously."*
> *# 18  p2/ 56-57*

> *".....I tried to keep medical appointment and  waited for physical exam.  It was like.... I  took care of myself accompanied by keeping medical appointment,   doctor could help and provided a great benefit for my health."  # 7 p6 /169-171*

> *"..... Doctor said I have recovered from cancer.  He did not make appointment.  But I still visit him regularly because I am afraid I may   have cancer again if I am not meet the physician as often as I can it may recur."  # 16 p 6 / 236-237*

> "**.....** *Since I have (cancer)..... I don't know what is going on; I know that cancer has ability to spread which   I fear. I must aware of it all the time since post cancer treatment.  I'm following up regularly. I don't know what  will happen to me  , I know....   cancer  can spread." # 8 p3 /62-64*

**4.2.2. Following Advice:**  Following advice was  defined as actions of the participants involving taking medication and strictly complying with recommendation. The colorectal cancer survivors perceived information which indicated taking medication and strictly complying with recommendation provided a great benefit for cancer treatment and restore their health status.  After colorectal cancer treatments, the ways the participants created self-confidence about their physical strength was to follow their physician advice.  Because they realized that doctors knew best about their health status and enabled them, prevent cancer recurrence. The quotations by the participants stated they followed physician advised as follows:

> *“..... Physician informed of cancer patient must follow step by step of treatment , then cancer may be cured, I believed in physician and comply to physician’s advice. Physician tried to treat me every thing until complete.” # 4 p10 / 262-264*

> *“.....Physician said I must follow and comply with physician’s order, do not miss. Then physician could take good care of me. I did comply with all regimens and never miss. Because, if I miss or did not do something I may be in trouble. I could tell how to deal with fear of recurrence. It was like I did what the doctor order me to do such as I should not eat that.... but should eat this...., I should do that and do this.” # 18 p4 /151-157*

> *“.....Today I eat food according to what the physician suggested me. I have to avoid eating pickle and meat.” # 13 p5 /180-182*

**Taking Medication** was defined as the colorectal cancer survivors took medication followed to the physician advice in order to meet the goal of prevention of cancer recurrence and cure co-morbidity. Some of the colorectal cancer survivors were informed of they took medication following the physician prescribed. Taking medication was influenced by the beliefs of modern medicine and trusting in physician. The quotations showed that the colorectal cancer survivors took medication according to the physician ordered as follows:

> *“.....After I was discharged from the hospital, since then I was not sure whether it was normal. But I kept taking medication continuously. Because I trust in physician and I believed that modern medicine could help. About something in bowel (colon cancer), I believe it recovered. But I kept on taking medication to treat diabetes mellitus and to reduce fat in blood.”*
> *# 12 p3/ 119-121*

> "**......** *I took vitamin C and E to prevent cancer recurrence according to physician prescribes. I also take medication to control cholesterol follow by the doctor order." # 3 p 5 /104-105*

**Strictly complying with recommendation** was and action of the participants conforming to the physician advice. Based on the perception of the colorectal cancer survivors about information related to colorectal cancer treatment, it was found that the participants had a feeling of uncertainty about treatment outcomes and the possibility to recur. The colorectal cancer survivors tried to prevent cancer recurrence by strictly conforming to the physician recommendation to make their body strong and safe from cancer recurrence. The two colorectal cancer survivors shared their experiences related to strictly complying with recommendations as follows:

> *"..... I am not sure about treatment outcomes, and feel uncertain. Physician suggested me to exercise and eat nourishing diet. I did comply with his suggestions continuously. My body is stronger." # 18 p4 / 151-155*

> *".....I took medication followed by doctor ordered me. I stick to doctor recommendation. I have to take medication one time a day, when 7 o'clock I have breakfast I used stop-watch and when the time passed 30 minutes I took medication as the doctor order. I always stick to perform like this. I feel safer." # 16 p8 / 289-292*

### 4.3 Using Alternative Medicine

Using alternative medicine was defined as the participants' actions using treatment beyond modern medicine. Using alternative medicine was the ways the participants employed to create physical strength and prevent cancer recurrence. The colorectal cancer survivors used alternative medicine in conjunction with modern medicine. They sought food, food supplements, herbs, Cheewajit, monk medicine, and accessory saunas to create physical strength in order to prevent cancer recurrence. Receiving information from books, mass media, and support from friends, family members, and health professionals could be resources in deciding of the colorectal cancer survivors to employ a specific kind of alternative medicine. Personal beliefs about the effectiveness of each kind of alternative medicine enabled the colorectal cancer survivors sought to use it. Using alternative medicines could create a positive thought or optimism associated with expected outcomes of preventing cancer recurrence. Some of the colorectal cancer survivors were told about herbs that could prevent cancer recurrence and cancer would never come back again, therefore they sought to use it. Some participants informed of the effectiveness of some kinds of alternative medicine helped increase physical strength and increase immune system such as using accessory sauna, eating food supplement and vitamin. Some kinds of herb such as Peking grass and Ling Zhi mushroom were believed to be able to cure cancer and prevent recurrence. The participants were eager to buy and take them.

> *".....I received information about accessory sauna from friend. She said it could help increase physical strength, asking myself, do I need it. It can help me strengthen up, increase immunity, and increase circulation in cells. I decided to buy it and use it." # 7 p5 /134-138*

> *".....I eating vitamin C mutual with monk medicine. Monk medicine made from potash alum called " Ya Som" I'm sure that eating vitamin C and the used of " Ya- Som" would help control and prevent cancer relapse . Now I use both." # 9 p9/358-364*

> *".....At early stage post treatment my friend brought me Peking grass. I boiled it then drank it for years.I always drink Cheewajit juice. It will help my body increase immune and prevent cancer recurrence." # 8 p8 / 209-211*

> *".....I use Thai herbs so I do not worry about the disease recurrence. I did not disbelieve in modern medicine, which I obtained from the hospital. After I received treatment by operation I went to Pracheenburi but I cannot remember what the name of intersection where Thai herbs was located, as I knew.... many*

> *cancer survivors used this herbs and getting better. No cancer reappearances." # 13 p1/ 19-22*

> *".....I realize I fear of ..... I took care of myself and eat 'Ling Zhi mushroom' in capsule." # 17 p2/45-48*

> *".....I ate three kinds of mushroom ' black and white Jew's ear and straw mushroom' and other kind of mushroom. White Jew's ear used for restore functions of kidney and excrete toxic substance out of the body. Eating three kinds of mushroom everyday is good for the one who have cancer or tumor. Then, tumor will be collapsed. Potato will help excrete fat out of the body." # 16 p4 / 144-148*

> *".....I eat food supplement. It helped my body strengthen. Food supplement with high fiber contained in tablet and I also eat food supplement which high vitamin." # 5 p5/ 246-248*

### 4. 4 Self-Monitoring

Self-monitoring was actions of the participants to manage themselves by watching for physical changes which could be a sign of cancer recurrence and to confirm cancer free. Self-monitoring helped the colorectal cancer survivors beware of their physical status. Self-monitoring involved observing change and confirming of no recurrence. The study found the participants needed to confirm of cancer free by asking for lab check, consulting physician, and seeing physician when perceiving health deviated. The details of self-monitoring were elaborated as follows.

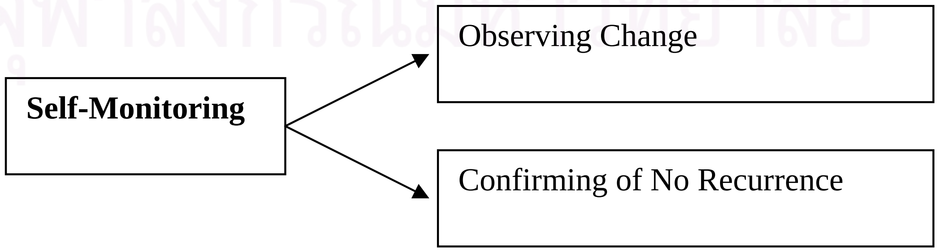

**Figure 9:** Sub-categories of Self-Monitoring

**4.4.1. Observing Change:** Observing change was an action of the colorectal cancer survivors to observe themselves for signs and symptoms of cancer reappearance. It was common in almost all of the colorectal cancer survivors to observe themselves. Since, the information they gained emphasized the importance of early detection could help prevent the progression of the disease and made the participants receive treatment on time. The colorectal cancer survivors' quotations expressed observing change as follows:

> *".....Right now I am anxious about the disease spreading. I try to observe what is wrong with me. Whenever I went to visit doctor I always ask him for detecting and checking my body." # 10 p5 / 243-244*

> *"..... Since, I have colorectal cancer, after cancer treatment as I know, I must observe myself all the time. Particularly when I went to toilet sometime it was like pinky water came out, but sometime it was not found. I always observe myself from time to time to find out something wrong." # 15 p 3 / 96-101*
>
> .

> *"..... I always observe my defecation about color and odor. I observed my defecation every morning to discover whether it recur or not" #12 p 5 / 200-203*

> *".....Today I am strong. However, I cannot make sure that cancer has gone way. It is like a gigantic current under the water. It may return and destroy me anytime. I must beware of it. I must take care of myself and closely observe myself simultaneously." # 7 p7 / 198-203*

**4.4.2 Confirming of No Recurrence:** Confirming of no recurrence was actions of the colorectal cancer survivors to determine cancer free by asking for lab check, consulting physician, and seeing physician when perceiving health deviated. Based on the perception of the colorectal cancer survivors, asking for lab check was always done for early detection of health deviation, which could become a precursor to a cancer recurrence. Since, the colorectal cancer survivors apprehended and felt uncertain about the physical changed or when they perceived health deviated, seeing physician and consulting physician could help them to confirm cancer free. As a result, the participants felt more comfortable.

**Asking for Lab Check** was the colorectal cancer survivors' action to detect suspicious sign and symptoms of cancer recurrence. The participants asked a physician for blood exam, and asked for a special investigation such as x-ray. It occurred when the colorectal cancer survivors sometimes felt apprehension about the recurrence. This feeling brought the colorectal cancer survivors to find out what was happening to them. Certainly, physician could assist them to investigate and made them felt more comfortable. Visiting physicians and asking for lab checks were the ways that the colorectal cancer survivors attempted to clarify about their health status. They also considered specific investigations to detect progression of the disease such as asking for a blood test of a tumor marker of colorectal cancer 'Cell Embryonic Antigen' (CEA) or a barium enema. The quotations addressed the colorectal cancer survivors asked for lab checks as follows.

> *"..... After treatment 2-3 years I asked physician for intestinal checking of barium enema .......I went to visit doctor and asked for blood exam, since I was discharged, the result of blood exam was never more than 1 ,last time it was .7 or .75 or something but it never more than 1. I wanted to check it when I visit doctor." # 8 p3 /62-65*

> *"**......** Doctor said it is not necessary for me to examine blood. In case of there is something wrong, like the result of blood test is elevated, I must aware of a chance of cancer recurrence."*
> *# 8 p 22 / 522-525*

> *"..... I went to visit physician I always ask for abnormality detection, asking for blood exam, and asking about the result of blood exam and results of physical exam." # 1 p4 / 86-87*

> *"..... I went to meet Dr. N. and asked for chest x-ray and x-ray computer. Nevertheless, blood exam was not checked. I asked Dr. N. he said blood exam was not necessary. I always ask doctor to help detect for the abnormality that may occur in the body." # 10 p5 / 235 -240*

**Consulting physician** was actions of the colorectal cancer survivors who found themselves uncomfortable, would urge a physician for suggestions. Some of them asked for information from the physician about how to prevent cancer recurrence and needed the physicians' explanations. They wanted to understand the right way to prevent recurrence. Many of them doubted about the information they perceived related to complementary therapy to prevent recurrence, therefore they visited the physician and consulted for more information. The quotations expressed the colorectal cancer survivors consulted their physician as follows:

> *"..... I must do something to prevent recurrence. Then I asked for suggestions from physician about what food I should eat. Physician said I can eat everything that provided benefit for health. It should be 5 groups of nourishing food." # 14 p 10 /386-399*

> *"..... I try to decrease eating meat. Some books said meat could be a cause of cancer recurrence. However, in reality of life, it is difficult to avoid eating meat. I got in trouble when I eat vegetarian food. I asked physician about what food I should eat. Doctor said I can eat everything." # 4 p 6 /116-120*

> *".....I consulted doctor about complementary therapy. The physician asked me the detail of complementary therapy. I explained; it made from burnt potash alum. He considered that it was not harmful. Then he allowed me to used accompanied by his treatment. I felt release. " # 9 p 6 / 259-265*

**Seeing Physician When Perceived Health Deviated** was defined as the participants attempt to discover the physical abnormality by seeing a physician when perceiving health deviated. The participants asked the physician to investigate what happened to them. The reasons the colorectal cancer survivors provided when they perceived the abnormality sign and symptoms then led them visited physician because of their fear of recurrence. Physical examinations and lab checked were always done to detect and determine whether it was a cancer recurrence or not.

> *".....I have bone pain and fatigue, I'm scare whether cancer spread to bone or not. I am not sure no one can tell about the disease spreading to anywhere it never tells. I urge to visit the physician for checking..... Nobody knows where cancer travels to. When there is something wrong I will urge to visit doctor. I do not hesitate to visit physician." # 10 p7 / 252-258*

> *".....I had abdominal pain then I went to visit physician, he said I'm ok, if I have something wrong he has to tell me. However, I am anxious and nervous. I may be sick of unknown disease or other diseases or cancer. I visit physician every time when I found abnormality. It was good. If there were something wrong, I would receive treatment on time. When I visited doctor, I feel good. Because if I am not well, doctor will help me. Not allow the disease progress until too late to cure." # 2 p10 / 279-281*

> *"..... Sometime, I had severe abdominal pain I urged to see the physician at the hospital. I was afraid it may relate to bowel. Right now, when there was something wrong I will go to ER." # 16 p 10 / 366-368*

> *"..... I have had something wrong around stoma. I doubt about it. It may be a tumor or not. Therefore, I visited physician. It was a tumor or not. He said it may not be a tumor like I think, it may be only old nodules." # 1 p3 /74-76*

In conclusion, the coloretal cancer survivors tried to build physical strenght after they have accepting self responsibility which influenced the thought of the participants to warn themselves to prevent cancer recurrence and tried to do their best in preventing cancer recurrence. To decrease their fear of cancer recurrence, building physical strenght was an effective way that they employed to prevent cancer recurrence. Building physical strength involved changing habits, comiting to modern medicine, using alterative medicine and self monitoring. The beliefs about a cause of cancer recurrence and support from their family members influenced ways the participants decided to cope with their fear of cancer recurrence which involved several methods as mention before to build physical strength.

### Stage 5 Developing Psychological Strength

Developing psychological strength referred to thoughts and actions of the colorectal cancer survivors performed to increase the psychological conditions to become stronger by finding a psychological security base, controlling thought, managing stress, and empowering self, which were employed to diminish their fear of cancer recurrence. It was normal for colorectal cancer survivors to have a feeling of fear of cancer recurrence. This feeling could disturb many aspects of life. Beyond building physical strength, the colorectal cancer survivors attempted to alleviate their fear of cancer recurrence by developing psychological strength. The thoughts and actions about how to develop psychological strength were influenced by the information and their beliefs about cause of cancer and its prevention as well as support from their family members. All concepts related to developing psychological strength were presented as follows:

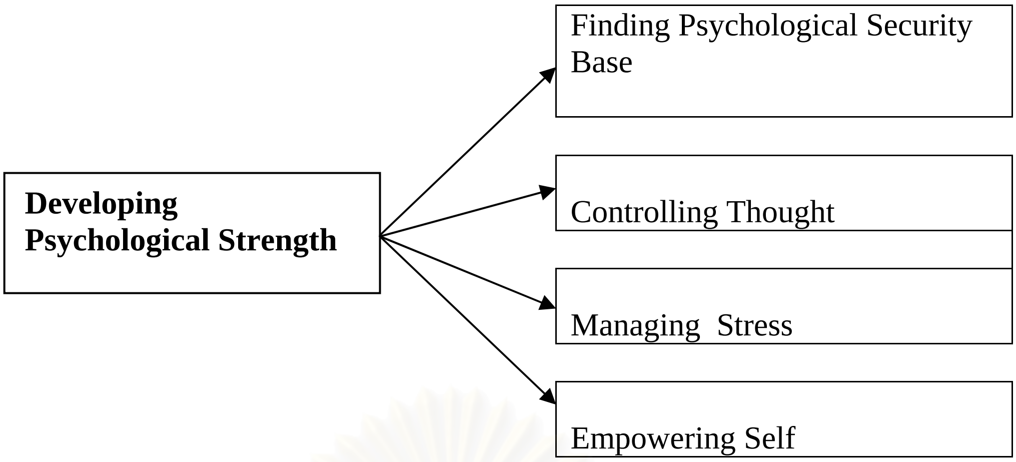

**Figure 10** : Sub-categories of Developing Psychological Strength

### 5.1. Finding Psychological Security Base

Finding a psychological security base was defined as the colorectal cancer survivors search for a safe place for their mind which was manifested by the colorectal cancer trusting physicians and holding on to religion. Finding a psychological security base played a significant role in creating a sense of security and enhancing psychological comfort. Finding a psychological security base was also a way of coping with fear of cancer recurrence that the colorectal cancer survivors used to develop psychological strength. It was found some interesting issues emerged from the data, which pointed out, that the Buddhist religion took part in creation a strong sense of mind and creation a sense of encourage of mind. All concepts related were presented as follows:

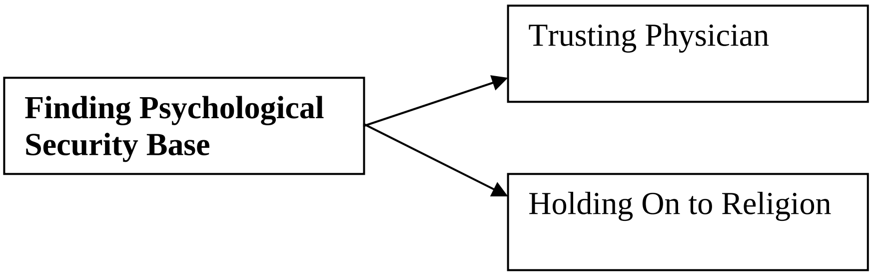

**Figure 11:** Sub-categories of Finding Psychological Security Base

**5.1.1 Trusting Physician:** Trusting physician was defined as a firm reliance on the ability of the physician. The participants expressed feelings of having confidence about physician’s competence, treatment procedures, and outcomes. Trusting in a physician could lead the participants to comply with the regimen, kept in touch with their physician, followed the physician advice, and kept medical appointments. Even though some colorectal cancer survivors entrusted in their physician but they still feel fearful of recurrence. Many of the participants stated that they have trust in their physician as follows:

> *“..... I strongly believed in physician, if I have 100 points I will give my physician all 100 points. I trust in treatment procedure, and I keep on medical appointment and never miss”#3 p8 /322-324*

> *“..... It is because I believe in physician so I can survive until now. Physician said if there is something wrong I must be hurry to visit him. I believed in him and because I was near him so I can survive.” # 13 p6 / 281-283*

> *“**.....** Even though I fear, but I think I feel comfortable because I believe in physician, I trust in him. My treating physician is Dr.K... When I am confusing about the disease I always ask him and do whatever he advised me to do.” # 21 p1/ 23-28*

> *“..... Doctor suggested me, I thought it was good. If it was not good he would not suggested. At least, if I did not receive treatment I may live for a month or two months. However, I received treatment I may live until a year or two years. Because doctor have learnt. He knows well, if not, he would not suggest me.” # 2 p6 /152-156*

> *“..... I think treatments I received from physician were the best and most suitable and the most effective. I am confident about controlling and being recovery.” # 1 p 5 /202- 204*

**5.1.2 Holding On to Religion:** Holding on to religion referred to the colorectal cancer survivor who believed in Buddhism always followed the Buddha’s words and performed religious activities to comfort their mind. Religion played a vital role in connecting the colorectal cancer survivors mind with the living world. Since the Thais adhered to the Buddhist religion, when facing stressful life events, they sought for resources to help comfort their mind. Religious activities, which involved meditation, merit sharing and making, praying, wishing and blessing, and reading religious books were used in the coping process to decrease the fear of cancer recurrence. All of these took part in creating psychological security base, which could develop psychological strength. Religious beliefs could create hope to survive longer for the colorectal cancer. Since the beliefs about cause of cancer came from bad karmas, coping by doing good deeds were thought to be increased good karmas. It could create the sense of secure and decrease the chance of recurrence. The quotations express about holding on to religion as follows:

> *“..... I read Dharma books. I did not waste my time. I may not be a person who believes so much like someone. I offered some food to the monk followed to the belief of Buddhism. I feel much better. I have cancer. I think it is because of my previous karma. Then I would merit sharing to the victim and whoever in order to comfort my mind.” # 14 p13 / 489-493*

> *" ..... I tried to practice meditation, which is very useful for me. Now, I am cool down and feel more release. After operation, I did merit making and parcticing religious activity I feel much better..... If the one who get cancer and have opportunity, best way is practice meditation to help prevent the disease relapse. Merit making and practice meditation were the great help. I am not worried about the disease recurrence anymore." # 9 p 9 / 418-419*

> *".....I believed in a result of religious ritual, and religious activities. Now it made me feel better, not suffering, not distress, my mind is calm down, I feel release." #10 p8/ 346-348*

> *".....Mostly, I always think of Lord Buddha and his words. I prayed. It made me concentrated because each time of praying, it took time, I have to pay attention and my mind was focused on praying, not nervous." # 8 p25/ 635-637*

> *".....Whenever I was sick I have to pray Na Mo Ta Sa..... 3 rounds and concentrate on the Buddha image and make a wish to protect me from danger. I wish like this." # 13 p 14/ 665-670*

> *"......When I preyed, I always made a wish. I wished .... I wanted to recover from the disease." # 9 p11 / 494-495*

### 5.2 Controlling Thought

Controlling thought was defined as actions of the participants performed to distract their thoughts about cancer recurrence, which involved thought stopping by keeping busy and focusing on here and now as well as thinking positively of life. It was normal for an individual who was diagnosed with cancer to concern about the chance of cancer recurrence at the time of post treatment. Fear of cancer recurrence could disturb their daily life. It could affect their work, as well as their family life. The study revealed many colorectal cancer survivors tried not to be concerned about cancer recurrence by controlling their thoughts. These can enhance the colorectal cancer survivors a strong sense of comfortable.

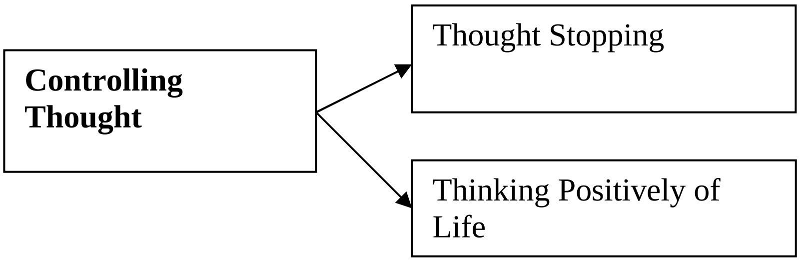

**Figure 12**: Sub-categories of Controlling Thought

**5.2.1 Thought Stopping:** Thought stopping was defined as a thought of the participants tried to stop concerning about cancer recurrence. Thinking about the disease recurrence can lead to emotional distress. Trying to control thought-by-thought stopping about cancer recurrence was the way to prevent emotional distress. The colorectal cancer survivor described that they control their thoughts by thought stopping which involves keeping busy and focusing on here and now.

**Keeping Busy:** The colorectal cancer survivors made themselves busy by keep working or doing something in order to distract thought about recurrence. The colorectal cancer survivors sought for something to do. The things that they did, such as hand made of camphor bag, scarf, knitting, embroidered cloth, and fruit sculptured. The quotations reflected the ways of controlling thought by keeping busy as follows:

> *“.....I am getting better, because I always keep working. I put an effort to do many works. Even though I’m tired. Why... because if I was tired I would sleep well and if I could not sleep I would think about the disease recurrence. Most of the time I would work, I did not leave the time waste, because whenever I had free time I will be nervous about the disease. I think if there is nothing to do, the thought of recurrence will float in my mind, so I try to make it busy.” # 10 p 13/ 523 -534*

> “**.....** *When I chitchat with my old friends it made me less concern about the disease recurrence. Some time I forget about it, about I have burden from the disease.” # 1 p7 /263-267*

> *“..... I try not to concern ... I sought for something to do to forget it. Like me, I separated the clock and clean and reassembled. I sought for hobbies. I like fixing thing. Sometime I separated computer apart and reassembled or write something about computer program.” # 4 p 9/ 192-197*

> *“..... I am always busy because I have business. I make a bag of camphor... That was my way to seek for doing something to forget the disease.” #8 p19 / 458-462*

> *“..... Each day, I have 3 granddaughters, they are learning grade 2, 3, 4. They are all girls. I have to take care of them. I have no time to think about disease.” # 13 p10 / 412-414*

**Focusing on Here and Now:** Focusing on here and now was defined as a thought of the participants concentrated on actual event instead of concerning about the disease recurrence in the future. On the long journey of life after cancer treatment, several threatening events appeared, however the colorectal cancer survivors tried not to worry about awful future. Some of colorectal cancer survivors revealed they concerned only what was going on here and now. Sometimes it was related to actual health problem such as flatulence and constipation. The quotations expressed the ways that colorectal cancer survivors focused on here and now as follows:

> *“...... Today I felt bad because I had flatulence and abdominal distended and constipation. But I can deal with it. I set up my mind; if today I can well defecate from now on I will be getting better.” # 5 p6 / 278-281*

> *“....... Right now I have constipation and little abdominal pain. I tried not to let it be like that. I am here I can take care of myself. I can deal with is by taking laxative and eating fruit. I think it will help.” #8 p25 / 644-545*

**5.2.2 Thinking Positively of Life:** Thinking positively of life was defined as the thought about gaining benefit from having cancer. In the midst of feeling fear of cancer recurrence, some colorectal cancer survivors have a perception of positive aspects in their life. Thinking positively of their life was a method to help control their thought toward the disease and consoles their minds. Some of the colorectal cancer survivors perceived of the benefit from having cancer as a result. This method helped create life more valuable in the living world. The quotations reflected how the colorectal cancer survivors reacted to focusing on positive aspects of life as follows:

> *"..... Since I have cancer, I took care of myself, I control food, rest and sleep I can feel my body is in good condition I am not fatigue, it' s o.k. My body is stronger than I have cancer. I selected nourishing food. Since I eat vegetarian food my body was getting cleaner." # 9 p14 /551-557*

> *"..... I like sewing and knitting. I like it for a long time, but I have no chance...., then I look for a chance. It is because I have cancer. I have more time and I have a chance to do it. I keep doing it... because I like it." #14 p9/ 338-340*

> *" ..... In every day life I feel well, nothing wrong , nothing was a problem. It was better for me to have colostomy. I did not use toilet share with anybody because I have colostomy. I may not grab or share toilet with other." # 14 p9 /347-348*

> *"..... Because, I have cancer, today I have time I have emotion in planting and gardening and it provided benefit for me. I could save my money. I did not hire some body to do it."*
> *# 21 p7/ 157-160*

> *"..... Now I am stronger than before. My body is better than before I was sick of cancer. I can read without eyeglasses, I can sing well, my voice is more powerful than before the time I was sick of cancer. I believe my body is much improved." # 7 p13/ 314-321*

### 5.3 Managing Stress

Managing stress was an action of the colorectal cancer survivors in dealing with a stressful life event/ situation originating from things surrounding them. Under the beliefs of the colorectal cancer survivors, the cause of cancer recurrence may come from stress. Thus, the colorectal cancer survivors tried to prevent chance of recurrence by managing their stresses. The study the colorectal cancer survivors' experience revealed they manage stress by relaxing, letting things go and avoiding stressful situation. The detail of each concept was presented as follows:

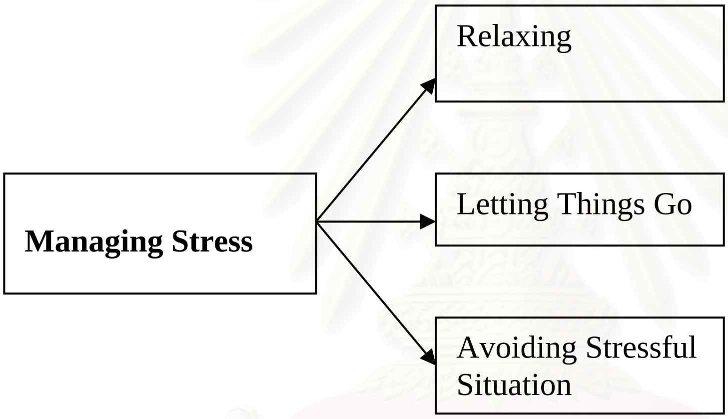

**Figure 13** : Sub-categories of Managing Stress

**5.3.1 Relaxing:** Relaxing was actions of the participants to make them fell release and enjoyable in order to decrease stress. The colorectal cancer survivors describes that they tried to manage their stress by doing something to make their mind relax. The ways they preferred to relax were painting, planting and exercising and these activities took their mind off the cancer recurring and this made them relax. They expressed their feeling that they felt joyfully when they were painting, planting and exercising. Some of the participants describe that whenever they saw a blossom bloom, they felt the world was meaningful to live. Many of the colorectal cancer survivors did exercise as usual. They also expressed their thought that they feel good when they did exercises. The quotations expressed the colorectal cancer survivors tried to relax as follows:

> *“.....I loved painting. it made me relax. Like painting clothes, It made me feel cheerful because there was nothing pressuree me. My friends and I went to learn batique paiting together, I love it. I appreciated to do it.” # 14 p8 /307-308*

> *“..... I always do exercise. I have friends to talk during exercise. When I focused on exercising, it makes me feel good. During the night I can sleep well, if I could not sleep I would think and re-think back and forth about the disease recurrence.”*
> *# 14 p 11 /432-434*

> *“.... Someday I sought to do something to make me fell relax. I did not know what to do. So I played cards with my friends, fixing clothes, embroidering clothes, and sewing, day pass by, and I was amusing.” # 3 p8 / 317-321*

> *“ ..... I have guava tree, you see...? It is a small one but when its season comes, it gives me many guava fruits. Last season, I wrapped its fruit around one month. The fruits became bigger and sweeter. I gave guava fruits to neighbors. They all said they liked it very much. I was very happy. Surprisingly, how I can do it well.” # 21 p3/ 168- 172*

**5.3.2 Letting Things Go:** Letting thing go was defined as thoughts and actions of the participants tried not to interested in things that could cause stress. In very day life, colorectal cancer survivors still lived with family. Family members and friends may become sources of stress. The beliefs about cause of cancer recurrence associated with the stress accumulation; therefore the colorectal cancer survivors have to manage stressful event, which occurred in their life by letting things go. It was found some of the colorectal cancer survivors ignored the children’s behaviors and tried not to be worried about the children. The quotations expressed the colorectal cancer survivors let things go.

> "**.....** *About my children, if she wanted to go to bed late, I would warn her just only 2-3 words. If she did not believe me, then let her go. She is grown up. I teach her too much, that is all. Nothing was more than this." # 14 p6 /236-238*

> *"..... Since, cancer may cause by stress, so I must ignore something. I must not serious and turn to love myself. Previous days I was worried about sons and husband. It made me anxious. Today I must ignore and let them go." # 7 p10 /256-260*

> *".....Whoever said something silly about the disease, like my cancer may recur, just only listen and let it pass. Let it go."*
> *# 6 p14/ 384-385*

> *"..... When talked about my son. I felt suffer and stress with my son, I let it go". # 8 p7 /272-273*

> *"...... My son always makes me worried. I have not to concern about my son. I let it go." # 15 p5 / 159-169*

**5.3.3 Avoiding Stressful Situation:** Avoiding stressful situation referred to actions of the participants related to avoiding telling about the illness, and changing work that can cause stress. According to the colorectal cancer survivors' perspective, they described having cancer and stress were associated. Stress was believed to be a cause of cancer recurrence, therefore they tried to avoid stressful situation.

**Avoiding Telling about the Illness:** The study of the experiences of the colorectal cancer survivors revealed some of them tried to avoid stress situation by avoiding telling about their illness.

> *“..... Today I am not a severe illness person. I try to avoid answer question about my illness. I try to close about my disease. I realize today they do not know but someday they may know. However, right now, I can walk I am fine. When I go out to buy a cup of coffee, someone ask about my illness. I try to avoid telling them. It worked.” # 2 p13 /351-355*

> *“..... Sometime when I met someone asked about the disease and said I was looking good, it o.k. However, for another, they tried to criticize my disease. I would walk away. Usually I will not tell anybody that I have cancer.”*
> *# 8 p1 /23-27*

> *“.....I never tell my neighbors that I have cancer. I told them that I received treatment about bowel. Nevertheless, someone may doubt about my disease. They did not speak out. I never tell anyone that I have cancer. Why ... because some of my neighbors may say something and make me loss a courage of mind ‘ Kum Lung Jai’.” # 12 p3 /100-103*

> *“..... After I knew I have cancer, I decided to tell no one. Because some one may be feeling pathetic, for some may think I deserved to have cancer. No... No... I will never tell. I kept it as a secret with me. I don’t want someone know about I have cancer.” # 3 p10 / 368-372*

**Changing Work** was actions of the participants to avoid stressful situations from work. The participants tried to change from previous work to a new work. Some of the colorectal cancer described that they used to work regularly but that work made them stress then they resigned.

> *“.....Today in normal life, I try to relax, I gave up sewing, because, if I did it and customers disappoint with it, they blamed me. I felt stress. I wanted to relax. ”*
> *# 14 p5/168-190*

> *“..... I stressed, when I worked in kindergarten school, there were many young students. I taught children 2 years old, I met their parents, some of them scolded at me. Someday, the children got lost. Sometime there was many things irritate me. Working with people can make me stressed. Finally I*

> *resigned, stayed home with mom, help mom sell retail at home." # 10 p5/ 225-236*

> *"..... When I worked as a command, I stressed very much. I have many things to think, to do, and to solve. Moreover, I stressed about my children. It is like stress accumulated gradually. I believe stress caused cancer. Now I changed my work and my position... I have less responsibility than I used to be." # 22 p 2 / 90-94*

### 5.4. Empowering Self

Life after cancer treatment was different from the time before having cancer. The experiences of cancer treatment reminded the colorectal cancer survivors about negative experience toward cancer treatment. These experiences may bring a feeling of discouragement and despair. Empowering self was an important way to develop self-courage to fight the disease. It refers to actions of the colorectal cancer survivors related to being courageous, thinking positively, living normal life and improving self-esteem. The concepts related to empowering self were elaborated as follows:

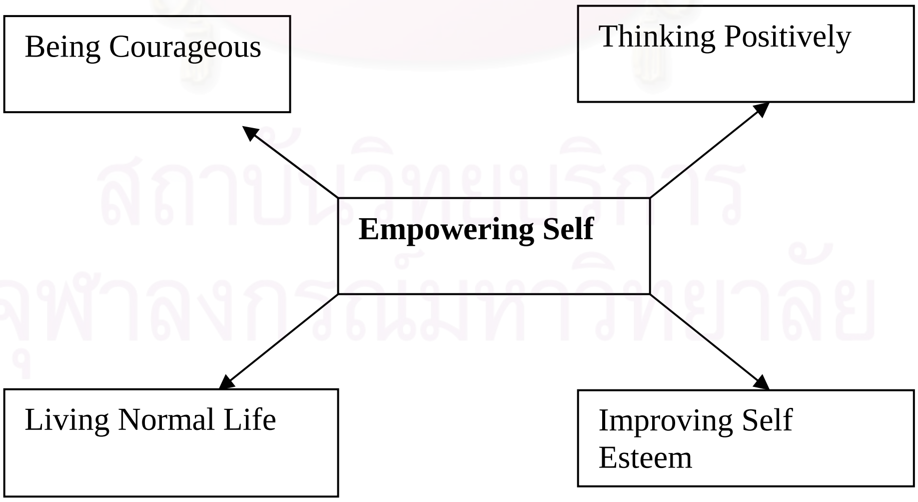

**Figure 14:** Sub-categories of Empowering Self

**5.4.1 Being Courageous:** Being courageous was a thought of the colorectal cancer survivors about not being afraid of having cancer and not giving up fighting the disease. The colorectal cancer survivors attempted to tell themselves that cancer was just one of the diseases like other diseases and they have to flight with it. Being courageous was composed of telling self not to be afraid and not giving up.

**Telling Self Not to Be Afraid:** The participants attempted to tell themselves about not to be afraid of the cancer. Because they perceived about being afraid of cancer may cause cancer recurrence. If they were afraid of cancer, they would despair and discourage. The quotations expressed the colorectal cancer survivors encourage themselves by telling self not to be afraid as follows:

> *".....I tried not to be afraid, the most important thing is not afraid, because if I was afraid my body would get worse as well as my heart would get worse too. Now I think I am not afraid of the disease and not afraid about treatment. Because if I am afraid of the disease and treatment, I think it may return and I may not survive. I may die soon." # 17 p10 / 386-392*

> *"..... I think people with the same stage of cancer are at the same risk. If they feel fearless, and did not interested in it. It is easy to treat. Thus cancer will not spread. If talking about fear, cancer will spread quickly; because, our bodies may turn weak and there is nothing resist or fight with cancer cell." # 5 p14 / 424-428*

> *"..... I must have a strong mind. It was as if I must not fear of cancer. When time comes, disease recurs, if time to die for me come, I dare to accept it. I must accept it. I think like this." # 13 p8 / 377-381*

**Not Giving Up:** Not giving up was a thought of the colorectal cancer survivors to fight with cancer in order to prevent its recurrence. The period of post cancer treatment may lead the participants to the feeling cheerless. To encourage the feeling courageous by not giving up could empower self in fighting with cancer recurrence. Some of the colorectal cancer survivors told how they tried not to give up fighting the disease as presented by the quotations as follows:

> *“..... I must be alive. I must recover from cancer. I must fight with it and I must have a will to live.” # 6 p14/ 383*

> *“..... I have not given up. I intend my cancer to be cured, it must be cured. I must live with a good quality of life. I do not want to be family burden. I think like this.”*
> *# 7 p9 /213-214*

> *“..... I must fight with the disease, and never surrender. I do not want to be suffered. I must take care of myself and make my body strong.” # 8 p11 / 176-178*

> *“..... Nevertheless, for some who did not have cancer may feel cancer was serious and fatal. However, if I intend to overcome it. it can be cured. There was only one way. It was my mind. I must intend to fight with it.”*
> *# 7 p8 / 225-230*

**5.4.2 Thinking Positively:** Thinking positively was defined as a thought of the colorectal cancer toward positive expected outcomes. The occurrence of feeling fearful led the colorectal cancer survivors attempt to find the positive aspects of thought towards the disease. It was found thinking positively affected the feeling of courage to do something. It could also give solace to their mind. The colorectal cancer survivors described their positive thought with a great effort to overcome the disease. In addition, it was found the colorectal cancer survivors expressed positive attitude toward the disease. The study the experiences of the participants allowed the researcher to discover many of the colorectal cancer survivors’ thinking positively and having courage of mind *(Kum Lung Jai)*.

> *“..... I think it is possible that my cancer has been cured. I control food, it is 60% gained from control food. I did merit making, and practicing meditation, and making peaceful mind it is 40% gained. Those made me have an opportunity to recover.”*
> *# 9 p12 /488-490*

> *“..... Why the word cancer and hypertension are quite different. It is like having cancer means death. In fact, heart disease when it attacked then people dies suddenly. It is faster than cancer. I have cancer I think it has been cure. But I must try to do something to control and prevent its recurrence.” # 8 p1 /23-27*

> *“**.....** Cancer is one of the diseases, which can be cured. If we thought about someone, they thought they were well; some of them pass away before me.**”** # 8 p11 / 179-182*

**Encouraging of Mind *“Kum Lung Jai”*.** It was a positive thought about one-self and the expectation of the recovery from the disease. It affected an effort to meet a specific goal of living without cancer recurrence. When the colorectal cancer survivors have courage of mind *“Kum Lung Jai,” it* could motivate the colorectal cancer survivors’ actions to do something in preventing the disease recurrence.

> *“..... It is because I have courage of mind “Kum Lung Jai”. To overcome the disease, courage of mind “Kum Lung Jai” is really important for me, It’s like a drive that impetus me to do something.” # 6 p13/359-362*

> *“ ..... Courage of mind ‘Kum Lung Jai’ is important. I think I must live, I must fight the disease. In fact nobody ever never found illness, illness is normal. But the most important thing is having courage of mind to overcome the disease.” # 7/ 1 p5/ 150-154*

> *“..... I have courage of mind “Kum Lung Jai.” Where do I get it? I have hoped it can help me. Instead of feeling despair, but I do not feel it. Actually, I am sure I can defeat it. It is like I have something to help me.” # 7 p4 /177-180*

> *“..... The one who fear and powerlessness no have encouraged of mind and full of anxiety, cells will weak and nothing to fight the disease. I have courage of mind “Kum Lung Jai.” You know... it affected my mind, my physical and social life. It is like a self healer of my mind.”*
> *# 5 p11 /433-434*

**5.4.3 Living Normal Life:** Living normal life was defined as actions of the participants to maintain their daily life that they used to do before. When the participants felt they were able to do something that they used to do, they gain a sense of encourage. After cancer treatment, the colorectal cancer survivors may feel fear of cancer recurrence but they attempted to maintain their daily life as it could be. The study of the colorectal cancer survivors’ experiences were shared by many of them. They did something they thought it was benefit and tried to live a normal life. They maintain social relationship, helping family, doing chores; participate in business, and caring for family. The quotations show the participants live a normal life as follows:

> *“..... My life is like everyday, it is a normal life. I nurtured my grandchildren, having meal, doing thing, doing everything as normal. I did not think about cancer recurrence.”*
> *# 12 p 7 / 329-330*

> *“..... I helped mom sell retail, mopped the floor, cleaned the house, carry things, swept the floor, and put sugar in bag. I tried to do every thing as I used to do before I was sick.”*
> *#10 p11/ 405-409*

> *“..... Now I went out for wedding ceremony, becoming a monk ceremony, and joining merit making ‘Tum Boon’. My friends invited me to give an offering especially a robe to a monk after Buddhist lent “Tod Kra Tin” or Dharma tour I would eager to go and never miss. ” # 10 p10 / 381-383*
> *“...... When I was at home I helped my granddaughter sell retail, waited for customer, changed my granddaughter for lunch time, did house works , not much... as possible as I could.”*
> *# 6 p3 / 72-74*

**5.4.4 Improving Self Esteem:** Improving self-esteem was defined as an increasing the feeing of self-worth and satisfied with being alive. The study of the colorectal cancer survivors' experiences revealed that they gained a sense of self worth in living for others for several reasons. They thought, they could provide benefits for people surround them. Some of them wanted to save money for their children, and thought about how to help their family, live as long as they can for their children, helping other people with cancer and generally helping people. Some of the colorectal cancer survivors passed experienced of taking care of themselves, they wanted to share their experience to others and wanted to help them deal with problem after cancer treatment.

.

> *"..... I do not trust in cancer recurrence. However, I think I would like to live longer for my children. I wanted to take care of my children as long as I can." # 22 p2 /53-57*

> *"..... From my experiences, I took care of myself and it worked. I think my thought my experiences would provide benefit for others. I wanted cancer patients listen to me. Somehow, if they agreed with my thought. It is o.k. But if not, I may provide benefit information for the one who is getting sick of cancer. I ready to share experiences. I have pieces of advice. Because I can see the world wilder, and I know more ." # 7 p 8 / 195- 199*

> *"..... I think I am useful for people around me, so I must safe my life to provide benefit for them. Like today, I have grandchildren, if I still being alive I can take care of them, it would be happy, my grandchildren still need me." # 7 p5 / 156-162*

> *"..... I have family. I have daughter, and I have grandchildren. I think my life is useful from them. I can provide benefit for them ." # 21 p 8 / 287*
>
> *"..... In the future, I plan to save money for the children. I can not make sure whether cancer recur or not.... I may die. It is uncertain." # 17 p9/ 325-328*

## Stage 6 Decreasing Fear

Decreasing fear was found to be a final stage in the explanatory model of living with uncontrollable fear of cancer recurrence. It was a consequence of coping with their fear. The colorectal cancer survivors attempted to lessen and control the fear of cancer recurrence with variety strategies. The fact that, the colorectal cancer survivors tried to prevent cancer recurrence, but fear of recurrence still stands in the colorectal cancer survivors' mind. Because of coping, the levels of fear of cancer recurrence diminished after the participants employed several tactics to lessen and control their fear.

The levels of fear of cancer recurrence before and after coping were different. Before the participants coped with their fear, the levels of fear were high but after they employed several ways to cope with their fear, the levels of fear were lessened. Obviously, the participants in the study shared their experiences that in every day life, they still feel fearful about cancer recurrence. But this fear did not disturb their daily routine. The levels of fear decreased and it was not harmful to self.

> *"..... It was not more or less. I did not fear of it too much. It did not affect me. Each day passed by but I still try to do it the best. Since I wake up until bed time, the fear of cancer relapse did not ruin my daily life." # 3 p12 / 425-429*

> *"..... I am not afraid or worried about cancer recurrence too much... because my body is stronger but I feel it."*
> *# 6 p12 /389-390*

> **".....** *I realize that whatever disease person has, it can make person die... Everything is non-existence. I have cancer but... not much worry about recurrence." # 8 p6 / 156-160*

> *"..... I am not anxious. As I knew, cancer may recur but I could make up my mind. Fear but not allow fear disturb my life."*
> *# 10 p8 / 322-326*

> *"..... I am not anxious about recurrence. Every one must die whether early or late." # 4 p 7 / 177-178*

> *"..... From the deepest of my heart, I still fear of cancer recurrence. However, not much, now I am o.k. In the past, at the beginning of post cancer treatment, I fear too much at that time and I was anxious so much. At present time, I feel fear of cancer spread but not much, until now, because I know about how to deal with it." #10 p12/ 469-476*

### Triggering Events

The study experiences of the colorectal cancer survivors discovered triggering events about cancer and its recurrence. Even though the participants believed in the effectiveness of treatment outcomes and they realized that they were doing the best in preventing recurrence but they perceived a chance to recur. In daily life, some of the colorectal cancer survivors had chances to meet triggering events. These events could activate levels of fear of cancer recurrence went higher than before. These related to appointment times, perceiving health deviation, and feeling uncomfortable. When the participants perceived a health deviation accompanied by the perception of cancer having a potential to spread, and the belief of cancer was a difficult disease to treat, it could motivate the thought of cancer could spread to adjacent organs. These could affect an emotional response to elevate the levels of fear of cancer resurfacing. Whenever they felt fearful, it brought them back to a stage of recognizing fear. Then the process of coping with fear moves on continuously again. The quotations related to triggering events were presented as follows:

> *"..... At the time when I visited doctor, he ordered me for blood exam. Firstly, I asked, it returned or not. I feel bad and apprehend. When appointment time came close around 2-3 days, my heart turn exhausted. I could not sleep and felt anxious. I was afraid that when I visited the doctor. If he said.... it's back. I am sacred to hear that and the doctor might want me to be checked up. If he*

> *told me like that... my heart would become smaller... In addition, I felt discomfort. However, if he told me that my blood was normal, not found something wrong, I felt release. For the next 3, 4, 5, months, I must visit doctor again, I always feel like this. The fear of cancer relapse went higher when appointment came close.”*
> *# 2 p 7/166-175*

> *“..... Frankly speaking, when I visited doctor for physical examinations, it triggered my thought of cancer recurrence, I doubt about it. It is here or not. I am anxious. It is because I know cancer can spread to adjacent organs in the body.”*
> *# 8 p 5/372-373*

Some of the colorectal cancer survivors perceived that their health deviated. This perception could stimulate the colorectal cancer survivors’ thought that the cancer may return. The twinges of organs led them to feel fearful of cancer recurrence. As a result, the levels of this fear increased and brought them to recognize fear again.

> *“..... I think I cannot forget I have cancer. Even though, I take good care of myself, my body becomes stronger. Whenever I have something wrong, like the day I went out for a trip. I had pain in my legs. I suddenly think about cancer... bone cancer or not.”*
> *# 8 p 7 /578-583*

> *“....... I am sure that I am well after I control food, exercise every day and practice meditation. But when I have pain in my arm and fatigue. ..... my fear return. I am not sure no one can tell about the disease. It never tells.” #10 p6/ 252-255*

In addition, feeling uncomfortable could also lead the colorectal cancer survivors feel fearful of cancer recurrence. When the colorectal cancer survivors felt uncomfortable, it could also lead to the thought of fear of cancer recurrence. The quotation of the colorectal cancer expressed their experiences about feeling uncomfortable and fear of recurrence.

> *“..... I tried to do the best to prevent cancer recurrence. Nevertheless, when I feel uneasy or I feel uncomfortable after I*

> *read the newspaper about famous actor who died of cancer. It made me feel fearful of recurrence again. ” # 15 p3/ 93-95*

> *“..... When my close friend died of cancer recurrence, although I control everything to prevent recurrence but I felt anxious. I am scare of it returning. ” # 8 p 5 /371- 713*

## Factors Influencing Coping with Fear of Cancer Recurrence

According to the study of the experiences of the colorectal cancer survivors in relation to coping with fear of cancer recurrence, it was discovered factors influencing coping were personal beliefs and social support.

### 1 Personal Beliefs

In this study, it was found personal beliefs were factors that influence the colorectal cancer survivors to cope with the fear of cancer recurrence. Personal beliefs were the beliefs of the individual related to cause of cancer and effective of each strategy to prevent cancer recurrence. Personal beliefs had a huge effect and underpinned the colorectal cancer survivors’ decision-making in dealing with fear of cancer recurrence. The colorectal cancer survivors described their beliefs as follows:

**1.1 The Belief Cause of Cancer:** The beliefs cause of cancer varied depending on information obtained and experience about cancer. Many of the colorectal cancer survivors talked about cause of cancer followed by their beliefs relating to food, emotion, defecation, stress, and environment. The beliefs cause of cancer affected coping methods because whatever was believed to be the cause of cancer it must be avoided.

**The Belief Food Cause Cancer:** The belief of food was a cause of cancer refers to the belief of getting cancer was caused by some kinds of substance contained in food. The participants described some kinds of food could impetus cancer recurrence. These beliefs affect ways of coping with their fear. They cope by avoiding eating some kinds of food to prohibit cancer recurrence.

> "**.....** *I think food is very important, at the time of getting colon cancer I like to eat grill food, broiled food with fat a lot. Grill food or broiled food contacted smoke thus I think it associated with colon cancer. I think like this because I love to eat like this very much." #17 p3 /90-94*

> *".... I think food I ate is the best, but several things I bought from market, I never know how they prepared it. Sometime, I could not wash every thing out. It can accumulate and caused cancer recurrence. " # 10 p3 /107-113*

> " **.....** *I believed about causes of cancer related to food and eating behaviors. Because, right now food we eat, it is full of toxic agent. This includes vegetable as well. All substances can accumulate in our body and caused cancer recurrence. " # 3 p3/68-72*

**The Belief in Taboo Food "Sa-Lang Food":** The belief in Taboo food "Sa-Lang food" was defined as any kinds of food, which the colorectal cancer believed to be able to trigger cancer recurrence. The participants tried to avoid eating Sa-Lang food in order to avoid triggering factors.

> *"..... I did not eat Sa-lang food, such as seafood, ferment food, and bamboo in salt. I did not eat fish in salt as well. Food in refrigerator, which was kept for a long time I would not eat either. Because it may cause cancer recurrence." # 6 p10 /273-276*

> *"..... I believe in Sa-Lang food, Dr. S. said cancer likes rich diet, savories, and dessert. If I avoid these kinds of food, cancer can't live but I can survive , cancer will disappear ,I believed so and try to avoid meat and so far... I feel good, not concern much about recurrence" # 9 p15/ 595-601*

**The Belief Stress Cause Cancer:** The belief of stress was a cause of cancer referred to the belief of getting cancer was a result of stress accumulation. The participants informed that they lived with stress for a long time, and stress increased gradually. Cause of stress came from many sources, such as worrying about a son, husband, work and other surrounding things. The ways of coping related to stress caused cancer were consistent with stress reduction. The quotations reflect the belief of stress as a cause of cancer.

> *“..... I believed stress cause cancer. I never know about this before. Many people said because, I was very stress so it may make me get cancer. I felt so stress before. But right now I try to avoid stress and make myself more relaxation.” # 3 p4 /112-114*

> *“..... I think cancer may be caused by several factors. When I met physician all confirmed stress is a cause of cancer. Therefore, I think stress is one of several factors that can make cancer recur. I did exercise everyday to release stress.” # 22 p10 /89-92*

> *“..... I realized that in the past I feel stress about husband, sons, and environment. My family was separated, my husband moved to another work place. I was so anxious about family burden. It was accumulated form time to time. It may become a cause of cancer. After colorectal cancer treatment, I tried not to worry.”*
> *# 7 p19/ 149-153*

**The Belief Pollution Cause Cancer:** The belief of pollution was a cause of cancer referred to the belief about environment such as air pollution, bad odors, or toxic substance surrounding the participants accumulated gradually and became the cause of cancer recurrence. The data explicated the belief about pollution from environment caused cancer. It was found that the participant coped by they moved from the polluted environment to avoid cancer triggering factors.

> “**.....** *I believe environment may cause cancer. Many times, when I worked as a kindergarten teacher, near the school, very bad odors always float to my class. It was very bad smells. Finally, I resigned from that school.” # 10 p3 /115-118*

> *“..... I believe my cancer may come from lead inside and surrounding factory. I resigned and moved to another place to avoid contact lead. ” # 12 p7 /304-305*

**The Belief Constipation Cause Cancer:** The belief of constipation was a cause of cancer referred to the belief of getting cancer was a result from constipation. The participants described their defecation habit with chronic constipation. Some of them explained constipation causes cancer, the belief that when people could not defecate for a long time it can cause toxic substance accumulated inside the body. The toxic substance could stimulate cancer recurrence. The participants coped with this problem according to their belief by increasing the ability to defecate and prevent constipation. Detoxification was a well-known method to remove toxic substances out of the body employed by the cancer population.

> *“..... I belief I have colon cancer because, I always have constipation. It is like when went to toilet if I could not defecate then let it be, I was never worried about it. Sometime I defecate every 2-3 days, particularly when I joined the meeting I never defecate during meeting until it was over. When I traveled and was on the way, I never stopped to defecate. I have symptoms of constipation since I was young. Until I went to visit the physician because I could not defecate about 2 weeks. Finally, I was investigated and diagnosed with colon cancer. After colorectal cancer treatment, I tried to control defecation by eating more vegetable and fruit. ” # 4 p2/16-28*

> *“..... I think, because I have chronic constipation, it can be a cause of cancer. Now I control defecate by selecting food to prevent constipation.” # 10 p4/137-142*

> *“..... I think constipation is caused by drink less water, eat less vegetable. There may be nothing stimulate bowel movement. Then*

> *it can cause constipation and finally turn to cancer. Today I drink a lot of water and eat more vegetable." # 9 p5 /209-220*

**The Belief in Retribution Cause Cancer: *Pen Rok Karm Rok Ven.*** The belief in retribution associated with religious belief in Buddhism and the Law of Karma. It referred to the belief of getting cancer was a result of bad karma in a previous life "***Pen Rok Karm Rok Ven***." Since cancer was recognized as a difficult disease to treat, being a cancer survivor was like the punishment by bad karma and standing on the probability to recur. The belief of doing good deeds, merit making and merit sharing would help create a comfortable mind and waiting for forgiveness. Almost all of the participants believed in getting cancer were a result of karma and they paid attention to practice activity that is more religious.

> *"..... I think why I had to receive treatment by operation twice. I recalled for experiences, when I was a boy I liked to shoot birds, and I could shoot it sharply at its abdomen. I realized I have cancer because it's retribution to the birds I must pay back. I have cancer because of parts of karma. I did merit making and sharing to wait for forgiveness." # 17 p5 /172-177*

> *"..... I cannot determine what can make me get cancer. Finally, the conclusion cannot be drawn. Sit down and think, Thai people with cancer are a result of karmas. I intended to do good deeds to release from karmas. " # 3 p7/187-188*

> *"..... I believe cancer is caused from karma. It is a disease of karma. Who created karma they must pay back. This is what I believed. Thus I must do good karma by praying and offering some food to the monk." #6 p7 /195-197*

> *"..... It is like something that cannot prove. I believe in Buddish religious, I believe in haven and hell. Who did bad karma must receive bad karma. Bad karma will affect your present life or next life I have never known. I myself believe that I have cancer because it is a result of karma. Thus, I tried to do some good things." # 9 p6 /241-245*

> *“..... Since I study this way, human was born because of karma. Human being has karma in born. Karmas can be good and bad. I myself have more karma than other does. It is because I have cancer whereas some have not. Therefore, I must do good deeds to create good karmas.” # 8 p13/ 440- 444*

**The Belief of Getting Cancer is Caused by Genes:**

The belief of getting cancer was caused by genes referred to the belief about cause of cancer was determined by heredity. The participant believed that they were prone to cancer recurrence easier than other groups of people because their parents and cousins had a history of cancer. This belief was perceived as an uncontrollable situation. Nevertheless, surprisingly, some participants tried to control this situation by changing behaviors to control and prevent cancer recurrence.

> *“..... I began to believe that gene is a cause of cancer. My sister got breast cancer now. My family history has shown some of family members were diagnosed with cancer. My aunt got colon cancer. Not surprisingly, why I have colon cancer. You know what... Now I try to control food to avoid cancer recurrence.” # 8 p23/ 594-596*

> *“..... I believe cause of cancer is gene. My father has leukemia, my uncle has colon cancer, and my aunt “Awe” has breast cancer. I myself have colon cancer. I always beware of avoid stress and food that contained toxic substance.” # 9 p5/ 199-207*

**Beliefs of Funeral Cause Cancer Recurrence:** Cancer recurrence was believed to associate with participating in a funeral. The participants believed that cancer would resurface because a higher power or supernatural power occurred during cremation ceremony and funeral. These beliefs effect coping behaviors by avoid participating in funeral and cremation ceremonies.

> *“..... I did go to my close friend’s funeral so I was like this. After that, I never go to funeral again. Even if, I pass cremation ceremony, you know what...I had breast pain. It is like some power run through my breast, my breast engorge, and pain. I’ve realize its affect, I will never go again.”  #10 p9/ 368-374*

> *“..... Before I went to cremation ceremony, I was fine I was strong.  I knew myself, I never have abdominal pain. After I went to cremation ceremony, I had abdominal pain, I could not eat, even though just a little food. I had flatulence. Then I went to visit physician and was diagnosed with colon cancer.  I think I will not go to funeral or cremation ceremony again.  I’m scare of cancer recurrence.” # 13 p5 /235-239*

> *“..... I would like to tell the other cancer survivors that they should avoid participating in funeral, many people said we must avoid..... Like my friend she received cancer treatment until almost recover.  Then she went to cremation, around one week passed, all her body was swollen and then less chance to live...she passed away.” # 9 p4/585-589*

**1. 2   Belief of the Effective of Each Strategy:** Almost all of the colorectal cancer survivors believed about the effectiveness of modern medicine and alternative medicine. These beliefs could enhance the feeling of security and could motivate the colorectal cancer survivors sought their use.

**The Beliefs of the Effectiveness of Modern Medicine:** The beliefs of the effectiveness of modern medicine included chemotherapy and radiotherapy. These beliefs could lessen the colorectal cancer survivors’ feeling fear of cancer recurrence. These beliefs could help develop a sense of secure after cancer treatment.

> *“..... Chemotherapy provided the same result in cancer treatment. Because the disease run along the body. It could travel to wherever it could.  Chemotherapy could go throughout body and it could cure cancer, I believed in its effectiveness that cancer can be cured.” # 6 p8 / 214-219*

> *“..... As I known about Chemotherapy, I believed it can cure cancer and cancer was destroyed. I believed in its effectiveness.” #3 p7-8/ 206-209*

> *“..... I think radiotherapy can help. Radiotherapy can destroy cancer cells. For me I received radiotherapy before operation it would enhance the effectiveness to cure cancer and provide an opportunity to higher recovery.” # 4 p4 /84-85*

**The Beliefs of Effectiveness of Alternative Medicine**:

The beliefs of effectiveness of alternative medicine were the beliefs of something, which may or may not prove scientifically like modern medicine. Some colorectal cancer survivors believe in the effectiveness of herbs, practicing meditation and using accessory sauna. It could create a positive thought or optimism associated with expected outcomes. Moreover, there was some evidence that supports the effectiveness of some kinds of alternative medicine, as if herbs and accessory sauna could prevent cancer recurrence. These beliefs led the participants seek to use it in conjunction with modern medicine. The use of alternative medicine and modern medicine may help increase the ability to cure and prevent cancer recurrence. These beliefs could create a sense of security.

> *“..... I believed in an effective of accessory sauna, if my body was not received help from accessory sauna, I might risk my life. It worked for me. I feel confident after I use it. I was nothing wrong. I used accessory sauna for a year.” # 2 p6 / 144-146*
> *“..... I eat Ling Zhi Mushroom, some says Ling Zhi Mushroom has some kind of substance which I believed in its effectiveness and I think it will prevent cancer recurrence.” # 17 p6 /213-214*

> *“I eat Thai herbs boiled in pot. It costs 300 Baht each. My friends told me that these Thai herbs could prevent colon cancer. I eat it until it turned dilute. Then I boiled these herbs in a new pot again.*

> *I got it from my sister's friend who has had colon cancer. She eats this herb so she can survive for more than ten years. "*
> *# 12 p11/515-520*

### 2 Social Support

Social support was defined as kinds and resources of support the participants received. It involved support from the family member, friends, and health professionals. Kinds of support were folk medicine such as herbs and food supplement, affection from family members and information from health care teams. The study revealed daughter and sons provided the folk medicine, information related to cancer and the food supplement to their elderly parents who were in remission stage after complete colorectal cancer treatment. These supports were underpinned by their beliefs about gratitude. Spouse always provided tangible support such as money and provided psychological support such as affection. Health professional provided information about food and some advices about how to take care of themselves. Social support influences how people cope and help the participants gain a sense of comfort. The participants informed of social support as follows:

> *".....My daughter bought me food supplement called "Allovera". It cost about 1000 Baht per bottle. This kind of medicine was advertised on TV. It is used for specific purpose of cancer treatment. I always eat it." # 13 p1-2/41-45*

> *"..... My daughter gave me food supplement of "Mix- Allovera". It cost 700-800 Baht. When it ran out of my daughter would buy it for me again, but if she was busy, I was not serious. Now I eat bio-aids and vitamin C, because my daughter works at* Qantas *Airline... She can buy it for me." # 3p 13/ 399-408*

> *"..... Physician provided me information that I could eat everything that benefit for health. It should be 5 groups of*

> *nourishing diet. Food can make the body turn to normal. This would be good for me." # 14 p 10 /395-399*

> *"......Post cancer treatment; I could talk to physician about my condition and the disease. Physician provided me a book about how to take care of myself. He explained me about food and using alternative medicine. It's a part of creating my self confident." # 7 p6 /167-169*

> *"..... At present, I always talk to my husband openly. In the past, I kept back the truth about money. Now he gave me money to restore my health and took me to doctors according to appointment time. My husband is very good to me. He also advised me to take care of myself and not go to crowded place." # 14p 6/231-235*

> *"..... My husband understood me that I was sick of cancer and the disease is in remission. He bought me some food supplement, vitamin and gave me money to donate for religious activities."*
> *# 21 p14 /419-420*

In conclusion, coping process with the fear of cancer recurrence was the stage of changes, which involved the behavioral and psychological efforts that the Thai colorectal cancer survivors used to decrease, and control the fear of cancer recurrence. It was composed of six stages. The first stage in the model began with recognizing fear then the participant obtained information about cancer and ways to prevent cancer recurrence by the means of active searching and passive searching. This made the stage of recognizing fear of cancer recurrence move to the stage of obtaining information. Information obtained affect the colorectal cancer survivors thought of reminding themselves to prevent and control cancer recurrence, as well as an intention to do their best in preventing cancer recurrence. This made the stage of obtaining information to move to the stage of accepting self-responsibility. The thought of self-reminding and doing one's best influenced the stage of building physical strength and the stage of developing psychological strength. As results, the participants have an intention to remind themselves and perform their best in building physical strength and developing physical strength to decrease and control fear of cancer recurrence. All stage was intimately linked together and pointed out that the Thai colorectal cancer survivors developed these stages to cope with their fear of cancer recurrence in order to decrease their fear. But whenever the colorectal cancer survivors perceived triggering events, the levels of fear went higher than before. it could brought them back to search for more information. It was also found personal beliefs and social support influenced the stage of building physical strength and the stage of developing psychological strength.

# CHAPTER V

# SUMMARY DISCUSSION AND RECOMMENDATION

Qualitative, grounded theory methodology was employed in the study. The model of “Living with Controllable Fear of Cancer Recurrence” was generated based on the colorectal cancer perspective. The model was composed of six stages, which were presented in Chapter IV. This chapter summarizes the research findings and discusses the strengths and the limitations of this study and implication for knowledge development, clinical practice, health policy and suggestions for future research.

## Summarize the Research Findings

The purposes of the study were to explain how the Thai colorectal cancer survivors cope with their fear of cancer recurrence and to generate the explanatory model that explained how the Thai colorectal cancer survivors performed the coping process for their fear of cancer recurrence. The findings discovered six stages in the coping process, which was grounded in data. They were recognizing fear, obtaining information, accepting self-responsibility, building physical strength, developing psychological strength and decreasing fear.

The qualitative grounded theory was employed as a research methodology. Data collections were saturated from the study of the experiences of the 22 Thai colorectal cancer survivors. All participants were recognized the diagnosis of colorectal cancer and the physician identified no evidence of cancer recurrence. There were 12 females and 10 males, ages varied from 38–73 years old. Almost all of them resided in greater Bangkok. It was found half of the participants had completed high school. All of them were Buddhists. There were about seven participants in each stage. Six participants received treatment by colectomy, chemotherapy and radiotherapy. Four participants received treatment by colostomy with radiotherapy and chemotherapy. Ten of them were cancer survivors for 2- 5 years and 19 participants were found comorbidities.

Coping process with fear of cancer recurrence in this study was defined as stages of change which involved the behavioral and psychological efforts that the Thai colorectal cancer survivors used to decrease and control fear of cancer recurrence.

The study identified recognizing fear was the first stage, which appeared in the coping process. Recognizing fear of cancer recurrence was defined as an emotion experienced in anticipation of the possibility of cancer relapse after complete colorectal cancer treatment. Recognizing fear of cancer recurrence revolved around fear of spreading, fear of suffering, fear of death, and fear of being a burden.

Coping began after the colorectal cancer survivors recognizing a fear of cancer recurrence. The study discovered the colorectal cancer survivors sought information about cancer, its recurrence and prevention. Information obtained influenced a thought of self-reminding and trying to do their best in preventing cancer recurrence. Obtaining information influenced ways of coping. It was found in the study that participants sought for information to understand about the nature of their disease, treatment and the way to prevent recurrence. Obtaining information could underpin the decision to select ways to cope. It was not limited by the level of education. Even though some of the colorectal cancer survivors in the study were illiterate and some graduated from elementary school, they tried to seek more understanding about their disease.

Accepting self-responsibility was the stage that occurred consecutively after the stage of obtaining information. It was an intention of the colorectal cancer survivors to meet the goal of preventing a cancer relapse. It involved self-reminding and doing one’s best. The stage of accepting self-responsibility influenced the stage of building physical strength and the stage of developing psychological strength. It affected the degrees of intention of colorectal cancer survivors to decrease and control the fear of cancer recurrence.

Building physical strength was a stage that followed accepting self-responsibility. It was actions of the colorectal cancer survivors to create and increase the body strength by the means of changing their habits, committing to modern medicine, using alternative medicine, and self-monitoring. Changing habits were composed of a change in eating, smoking and drinking, exercising and resting and sleeping. Committing to modern medicine consisted of keeping medical appointments and following advice. Alternative medicine was sometimes used in conjunction with modern medicine. Self-monitoring was composed of observing change and confirming of no recurrence by asked for lab check, consulted physician and saw physician when perceived health deviated.

The stage of developing psychological strength was thoughts and actions of the colorectal cancer survivors, performed to increase the psychological conditions to become stronger by finding a psychological security base, controlling thought, managing stress, and empowering self to diminish their fear of cancer recurrence. Finding psychological security base was consisted of trusting physicians and holding on to religion. Obviously controlling thought was the ways the participants used to create the strength of mind. It was composed thought stopping by keeping busy and focusing on here and now and thinking positively of life. Managing stress was composed of relaxing, letting things go and avoiding stressful situation. Empowering self was composed of being courageous, thinking positively, living normal life and improving self-esteem. The stage of developing psychological strength and the stage of building physical strength occurred simultaneously after the stage of accepting self-responsibility. Then both stages moved to the stage of decreasing fear.

Decreasing fear was a final stage in the coping process. It was a consequence of the coping process. All stages of coping process aimed to decrease and control fear of cancer relapsing. Although, the colorectal cancer survivors attempted to prevent cancer recurrence, they still felt fearful because they perceived of the possibility of recurrence. However, they could live with normal levels of fear. The level of fear of cancer recurrence was not stasis. It was depended on fear triggering events. Whenever the participants perceived fear triggering events, the levels of fear increased. Then the coping process moved on from the stage of decreasing fear returned to the stage of recognizing fear again.

The research findings revealed that personal beliefs about the cause of cancer recurrence and the beliefs about the effectiveness of strategies to cure cancer and prevent recurrence and social support were factors influencing ways of coping.

## Discussion

The explanatory model of " Living with Controllable Fear of Cancer Recurrence" could illustrate the coping process with the fear of cancer recurrence. The model provided a descriptive knowledge and enhanced an understanding of the coping process with the fear of cancer recurrence as a holistic view. A coping process emerged in the model of living with controllable fear of cancer recurrence has been found since the participants in the study recognizing fear of cancer recurrence. The study experiences of the colorectal cancer survivors allowed the researcher discovered recognizing fear of cancer recurrence involved the four types of fear that revolved around fear of spreading, fear of death, fear of being a burden and fear of suffering. Whereas the study of the fear in women with breast cancer by Vickberg (2003) found the fear of cancer recurrence revolved around fear of death, fear of suffering and fear of further treatment. These findings support the nature of a normal fear. The natures of normal fear in all human being are fear of death and fear of suffering which continues to the end of life (Bailey and Clarke, 1989).

Since fear was perceived as a life threatening situation and it functioned as a stress, which was needed the coping process to maintain equilibrium. Cancer survivors may use one or a combination of several methods to create a coping process in dealing with their fears of cancer recurrence as a holistic view (Nail, 2001). The colorectal cancer survivors began to seek information about cancer, its recurrence and how to prevent recurrence. Seeking information was commonly found in the study related to individuals with cancer by Levneh (2000); Karnchanajaree (1993); Surakul (2001); Wiesman (1979). Information obtained played a vital role in coping process. It could enhance the colorectal cancer survivors' knowledge and understanding about colorectal cancer and how to prevent cancer recurrence. Information obtained influenced the thoughts of the colorectal cancer survivors to remind themselves and doing their best. Doing the best was a coping behavior found in the study related to cancer patients by Hanucharurnkul and Intrarasombut (1988). It reflected the degrees of an intention of the colorectal cancer survivors perform to control cancer recurrence. Information obtained indicated strategies to decrease and control fear of cancer recurrence by building physical strength and developing psychological strength. The stage of building physical strength and developing psychological strength appeared after self-responsibility was built. They reminded themselves and did their best in building physical strength, which involved the changes in previous habits of eating, smoking, drinking, exercising, resting, and sleeping to a healthy life style. These findings were consistent with the study of the breast cancer patients and the fear of cancer recurrence by Vickberg ( 2001). The study also discovered the participants coped by keeping medical appointment, following advice, and using alternative medicine. These coping methods were congruence with the findings of the studies by Kritsanapan (1989); Karnchanajaree (1993) and Surakul ( 2001). However, coping by observing change and confirming of no recurrence were not reported before. Building physical strength was also discovered in the study of Karnchanajaree (1993) and Surakul (2001). It indicated that coping behaviors of the colorectal cancer survivors to maintain physical strength was an important issue to concern in preventing cancer recurrence.

The stage of developing psychological strength occurred after the stage of accepting self-responsibility. It also appeared simultaneously with the stage of building physical strength. In this stage, the colorectal cancer survivors managed their fear of cancer recurrence by finding a psychological security base, controlling thought, managing stress and empowering self. These findings were found in the study by Karnchanajaree (1993) ; Chunlestskul (1997) and Surakul ( 2001). Whereas the western study showed that cancer survivors coped with their fear of cancer recurrence by openly sharing their emotions and concerns, using humor, looking for positive aspects, finding benefits of life (Baum, 2003; DeLeeuw and Ros, 2003). Surprisingly, using humors was not stated in the coping paradigm of Thai culture. This study also discovered the participants coped by thinking positively of life, letting thing go, relaxing and avoiding stressful situation which were congruence with the findings in the study by Karnchanajaree (1993); Levneh (2000) and Weisman (1979). The findings of this study point out that stress and coping in cancer patients was not only coped by focusing on physical aspects but also psychological aspects.

According to the transactional model of stress and coping developed by Folkman and Lazarus (1984), there are two types of coping, problems–focused and emotional–focused. Problem- focused strategies aimed to change the person-environment relationship by acting on oneself or the environment through behaviors, whereas the purpose of emotional- focus coping was to change the manner in which the relationship with the environment was attended to ease the stress. This study, information obtained, accepting self-responsibility, building physical strength and developing psychological strength were the participants' coping behaviors, which involved two types of problems-focused coping and emotional- focus coping.

Decreasing fear was a consequence of coping with the fear of cancer recurrence. Even though in every day life, the participants tried to cope with their fear of recurrence but fear remained in a controllable level. Whenever the participants encountered fear triggering events, the level of fear elevated higher than usual. As a result, it was interpreted as a life-threatening situation then returned to the stage of recognizing fear again. Thus coping is a dynamic and a continuous process, not limited by unfavorable resolution, and capable of constant re-evaluation and reappraisal (Parle, Jones and Maguire,1996; Vigberg, 2003).

This study found that the levels of fear varied. The high level of fear of cancer recurrence could diminish the ability to cope whereas in the study by Leventhal and

Diefenbach (1996) determined that high levels of fear were found to be more effective in changing an attitude and actions to cope with their fear, when compared to low levels. It is important to concern the relationships of the levels of the fear of cancer recurrence and the ability to cope.

The impact of personal beliefs included the belief cause of cancer effects coping behaviors (Pongthavornkamol, 2000). Obviously, the findings of coping behaviors in the study supported the notion in the study of Pongthavornkamol (2000) that the different 'beliefs cause of cancer' brought into the different coping strategies. The study found the beliefs about food, stress; constipation, heredity, and retribution were believed to be a cause of cancer. The participants coped by changing habits to avoid triggering factors. Furthermore, the beliefs of the effectiveness of modern medicine led the participants to conform to treatment procedure and comply with regimen. Alternative medicine such as, herbs, monk medicine, Cheewajit, and meditation led the participants to seek for them. It can say beliefs have a huge impact on how people decided to cope. These findings were congruent with the notion of Cohen and Welch (2000) that the beliefs affected coping behaviors. Besides, Wongtes ( 2000) supported the finding that the beliefs and using complementary therapy were modes of practice to care for Thai people's health and to cure their disease and illness that were congruent with the Thai way of life and culture.

The Buddhist religion and Thai culture are intimately linked together (Burnard and Naiyapatana, 2004). According to the research finding, an interesting issue to consider for discussion is the belief about the Buddhist religion and the beliefs of having cancer is a result of bad karmas or 'retribution'. Almost all of the participants in the study believe in 'the Law of Karmas' which appears in Buddhism. It is normal for Thai people to believe in the Law of Karma. This belief is believed to be a cause cancer as a result of bad karma in their previous life (Burnard and Naiyapatana,2004; Klausner,1993;and Ratanajarana, 2005). The ways to cope with fear of cancer recurrence were congruent with these beliefs. It was found the participants in the study did merit sharing, merit making, doing good deeds, offering some food to the monk, praying, and practicing meditation. These coping behaviors correlated with religious beliefs. Buddhism has an impact on how people cope. Researches reported that cancer survivors living in western societies where the majority are Christian, coped with their fear of cancer recurrence by they faith in god as well as practicing religious activities such as going to church, reading the Bible and praying to ease their fear of cancer recurrence (Baum, 2003; DeLeeuw and Ros, 2003; National Medical Research Council USA, 2003; Oncolink, 2004; Stanton, 2003; and Vickberg, 2001). It can say religious beliefs play a vital role in coping with the fear of cancer recurrence found in Thai society and western society. It also plays a part in spirituality which influences the ways people cope to comfort their mind because of spiritual coping. Religious belief tends to go along with good adaptation to illness, though personal spiritual development (Barraclough, 1999).

Social support could affect coping behaviors. It was found social support facilitated the participants in deciding on how to cope. It was resources that the colorectal cancer survivors appraised to gain benefit and assist them to overcome the life-threatening situation. There was evidence in the study that their family members: daughters and sons took part in supporting the elderly colorectal cancer survivors concerning psychological support, tangible support and information support. Helping people was believed to be doing good deeds. Doing good deeds appeared in the Buddha’s words. As mentioned earlier, Buddhism infiltrates all aspects of Thai culture. Almost all of colorectal cancer survivors were elderly parents. Helping elderly parents is considered doing good deeds by expressing gratitude to them (Ratanajarana, 2005). Expressing their gratitude to parents is common in Thai culture (Burnard and Naiyapatana, 2004). The participants revealed husbands and wives always provided affection, money, and alternative medicine for them. These encourage them to live with warmth and confidence. The findings of this study determine that social support paid a vital role in coping which is congruent with the study by Diekmann (1988) that found social support provided positive outcomes of coping in cancer patients.

## Strengths and Limitation of the Study

The strength of the study required the researcher to show the research process to display reliability and completeness. The researcher collected data by a technique of triangulation involving in depth interviews and close observations as well as field notes, which took place both at the hospital environment and home settings that provided the fact of the data obtained. A good relationship between the researcher and the participants and prolonged contact helped create the openness of the participants' experiences. The researcher confirmed concepts emerged under the supervision of a thesis advisor and an experienced qualitative research grounded theorist and peer debriefing. Heterogeneous sampling was performed to seek for variations of the information to increase the applicability of the study. Heterogeneous samplings were done by searching the personal information of the participants and the history of illness. There were differences in age, sex, educational levels, and stage of disease, duration post treatment, comorbidities, marital status, and type of cancer treatment procedures. The interviews took about 45-90 minutes. The key informants provided rich information and allowed the researcher to interview them twice.

Limitations of the study were some of the participants were reluctant to reveal their experiences related to the fear of cancer relapse, even though a good rapport was built. It was because the word fear provided a negative feeling to the participants. In addition, some colorectal cancer survivors refused to be interviewed a second time. That was because, the interview took time, and the participants were worried about doing chores and routine work. Therefore, some aspects that the researcher wanted to seek were limited.

## Contribution the Findings to Nursing Science

According to contemporary literature, there was a limit in the knowledge of the coping process with the fear of cancer recurrence from the perspective of the Thai colorectal cancer survivors. This study can provide information about knowledge development, clinical practice, health policy, and suggestions for future research, which are elaborated as follows:

### Knowledge Development

The research findings discovered the model of living with controllable fear of cancer recurrence, which emerged from the colorectal cancer survivors' perspective that took place in natural settings. The model can provide new descriptive knowledge that related to how Thai colorectal cancer survivors dealt with their fear of cancer recurrence. The findings also provided a holistic description of the phenomenon under the study and provided more understanding for nurses. The research findings also discovered a daily routine strategy that colorectal cancer survivors employed to lessen and control fear of cancer recurrence that happened in reality. The study revealed the relationships among the stages of obtaining information, accepting self-responsibility, building physical strength, developing psychological strength and deceasing fear. The findings provided the directions to the nurses that the study could be developed to produce a possible plan for psychological care for colorectal cancer survivors who fear cancer recurrence. The findings of this model could close the gap of knowledge and broaden the knowledge in nursing science.

These research findings emerged from empirical evidence to help identify nursing autonomy and the boundary of the nursing profession. The explanatory model of living with controllable fear of cancer recurrence provides a descriptive knowledge in dealing with fear of cancer recurrence that can enhance an understanding for psychological care for the Thai colorectal cancer survivors. The model showed the stages of change from the stage of recognizing fear of cancer recurrence to the stage of decreasing fear and factors influencing coping process. These findings could expand nursing knowledge in terms of the description of how the coping process with the fear of cancer recurrence appeared. To enhance psychological well being among Thai colorectal cancer survivors, nurse can use these finding educate them to cope with their fear logically. Religious beliefs are a key factor for the Thai colorectal cancer survivors that helped comfort their mind. Understandings of the colorectal cancer survivors' religious beliefs enable nurses to have an insight for a more complete picture of the coping process that the colorectal cancer survivor used.

**Clinical Practice**

Coping with fear of cancer recurrence was always found in the remission stage, the levels of fear of cancer recurrence affect the colorectal cancer survivors' activities to cope. The findings indicated the colorectal cancer survivors tried to cope with their fear, the fear of cancer recurrence remained at a normal level, and it became adaptive.

According to the research findings, information obtained, social support and the religious practices played a vital role to lessen and control fear of cancer recurrence. These findings can facilitate health personnel in providing the direction to develop the projects for psychological care and promote the psychological well being for the Thai colorectal cancer survivors. Providing knowledge about colorectal cancer, and ways of practice to prevent cancer recurrence, enhancing the family members, friends, and beloved one to provide all kinds of support should be done. Finding places in hospital for practicing religious activities should be concerned. These findings help create activities for clinical nursing practice which involve promoting physical strength and enhancing psychological strength to decrease the fear of cancer recurrence.

## Health Policy

The findings provide a descriptive knowledge and enable nurse to understand about how the colorectal cancer survivors coped with their fear of cancer recurrence. This descriptive knowledge can be used to guide the health policy in the hospital as follows :

1. Establishing centers to support psychological care for the cancer survivors by providing a psycho –education and counseling session in the hospitals.
2. Enhancing co-operation between health care personnel and cancer survivors who experienced fear of cancer recurrence and can encourage psychological well- being among maladaptive cancer survivors. This can be done through counseling by telephone, individual, and group discussions.

## Suggestions for Future Research

According to the research findings, it was found the level of fear was not stable. Interestingly, colorectal cancer survivors who had high levels of fear of cancer recurrence could not find a way to deal with this fear whereas the colorectal cancer survivors who had normal fear could manage this problem logically. Suggestions for future researcher are as follows:

1. Develop instruments to measure the levels of fear of cancer recurrence.
2. Test model to confirm the effect of variables that occurred in the model to explain how it affects effect. The result can be used as guidelines for designing psychological intervention suitably.

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# APPENDICES

# APPENDIX A

ที่ ศธ 0512.11/ [illegible]

คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
อาคารวิทยกิตติ์ ชั้น 12 ซอยจุฬา 64
เขตปทุมวัน กรุงเทพฯ 10330

[illegible] มกราคม 2549

เรื่อง ขออนุมัติบุคลากรเป็นผู้ทรงคุณวุฒิ

เรียน คณบดีคณะพยาบาลศาสตร์ มหาวิทยาลัยบูรพา

เนื่องด้วย นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ นิสิตขั้นปริญญาดุษฎีบัณฑิต คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กำลังดำเนินการวิจัยเพื่อเสนอเป็นวิทยานิพนธ์ เรื่อง "กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก" โดยมี รองศาสตราจารย์ ดร.จินตนา ยูนิพันธุ์ เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ และผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ร่วม ในการนี้จึงขอเรียนเชิญ ผู้ช่วยศาสตราจารย์ ดร. กนกนุช ชื่นเลิศสกุล เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลที่นิสิตสร้างขึ้น เพื่อประโยชน์ทางวิชาการต่อไป

จึงเรียนมาเพื่อโปรดพิจารณาอนุมัติให้บุคลากรข้างต้น เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลดังกล่าว คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่าน และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร. สุกัญญา ประจุศิลป)
รองคณบดีฝ่ายวิชาการ
ปฏิบัติราชการแทนคณบดีคณะพยาบาลศาสตร์

| | |
|---|---|
| สำเนาเรียน | ผู้ช่วยศาสตราจารย์ ดร. กนกนุช ชื่นเลิศสกุล |
| งานบริการการศึกษา | โทร. 0-2218-9825 โทรสาร. 0-2218-9806 |
| อาจารย์ที่ปรึกษา | รองศาสตราจารย์ ดร. จินตนา ยูนิพันธุ์ โทร. 0-2218-9801 |
| อาจารย์ที่ปรึกษาร่วม | ผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา โทร. 0-2218-9831 |
| ชื่อนิสิต | นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ โทร. 0-5044-6596 |

[illegible]วิทยาลัยพยาบาลทหารอากาศ [illegible]
เลขรับ ๖๕ ๑๓๖๐
วันที่ ๑๓ ม.ค. ๔๙
๐๘๓๐
เวลา

ที่ ศธ 0512.11/ 047

คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
อาคารวิทยกิตติ์ ชั้น 12 ซอยจุฬา 64
เขตปทุมวัน กรุงเทพฯ 10330

10 มกราคม 2549

เรื่อง ขออนุมัติบุคลากรเป็นผู้ทรงคุณวุฒิ

เรียน ผู้อำนวยการวิทยาลัยพยาบาลทหารอากาศ

เนื่องด้วย นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ นิสิตขั้นปริญญาดุษฎีบัณฑิต คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กำลังดำเนินการวิจัยเพื่อเสนอเป็นวิทยานิพนธ์ เรื่อง "กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก" โดยมี รองศาสตราจารย์ ดร.จินตนา ยูนิพันธุ์ เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ และผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ร่วม ในการนี้จึงขอเรียนเชิญ นาวาอากาศโทหญิง กลฤดี โรจน์วิริยะ หัวหน้าแผนกวิชาการพยาบาลจิตเวช เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลที่นิสิตสร้างขึ้น เพื่อประโยชน์ทางวิชาการต่อไป

จึงเรียนมาเพื่อโปรดพิจารณาอนุมัติให้บุคลากรข้างต้น เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลดังกล่าว คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่าน และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้

- ทราบแล้ว
- มอบ น.ต.หญิง กลฤดี [illegible]
[illegible]

น.อ.หญิง [illegible]
[illegible]
๑๓ ม.ค. ๔๙

ขอแสดงความนับถือ

สุกัญญา ประจุศิลป

(ผู้ช่วยศาสตราจารย์ ดร. สุกัญญา ประจุศิลป)
รองคณบดีฝ่ายวิชาการ
ปฏิบัติราชการแทนคณบดีคณะพยาบาลศาสตร์

<u>สำเนาเรียน</u> นาวาอากาศโทหญิง กลฤดี โรจนวิริยะ
<u>งานบริการการศึกษา</u> โทร. 0-2218-9825 โทรสาร. 0-2218-9806
<u>อาจารย์ที่ปรึกษา</u> รองศาสตราจารย์ ดร. จินตนา ยูนิพันธุ์ โทร. 0-2218-9801
<u>อาจารย์ที่ปรึกษาร่วม</u> ผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา โทร. 0-2218-9831
<u>ชื่อนิสิต</u> นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ โทร. 0-5044-6596

ที่ ศธ 0512.11/ [illegible]

คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
อาคารวิทยกิตติ์ ชั้น 12 ซอยจุฬา 64
เขตปทุมวัน กรุงเทพฯ 10330

[illegible] มกราคม 2549

เรื่อง ขออนุมัติบุคลากรเป็นผู้ทรงคุณวุฒิ

เรียน ผู้อำนวยการวิทยาลัยพยาบาลบรมราชชนนีชลบุรี

เนื่องด้วย นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ นิสิตขั้นปริญญาดุษฎีบัณฑิต คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กำลังดำเนินการวิจัยเพื่อเสนอเป็นวิทยานิพนธ์ เรื่อง "กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก" โดยมี รองศาสตราจารย์ ดร.จินตนา ยูนิพันธุ์ เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ และผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ร่วม ในการนี้จึงขอเรียนเชิญ ดร. ศุกร์ใจ เจริญสุข พยาบาลวิชาชีพ ระดับ 7 เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลที่นิสิตสร้างขึ้น เพื่อประโยชน์ทางวิชาการต่อไป

จึงเรียนมาเพื่อโปรดพิจารณาอนุมัติให้บุคลากรข้างต้น เป็นผู้ทรงคุณวุฒิตรวจสอบความถูกต้องการให้รหัสและประเภทข้อมูลดังกล่าว คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่าน และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร. สุกัญญา ประจุศิลป)
รองคณบดีฝ่ายวิชาการ
ปฏิบัติราชการแทนคณบดีคณะพยาบาลศาสตร์

| | |
|---|---|
| สำเนาเรียน | ดร. ศุกร์ใจ เจริญสุข |
| งานบริการการศึกษา | โทร. 0-2218-9825 โทรสาร. 0-2218-9806 |
| อาจารย์ที่ปรึกษา | รองศาสตราจารย์ ดร. จินตนา ยูนิพันธุ์ โทร. 0-2218-9801 |
| อาจารย์ที่ปรึกษาร่วม | ผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา โทร. 0-2218-9831 |
| ชื่อนิสิต | นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ โทร. 0-5044-6596 |

ผบ 167

กพย.รพ.ภูมิพลอดุลยเดช พอ.บนอ
เลขรับ ๑๔๐๓
วันที่ ๒๗ ต.ค. ๔๘
เวลา ๑๐๓๕

รพ. ภูมิพลอดุลยเดช พอ.บนอ
เลขรับ ๗๖๕๒๗
วันที่ ๒๕ ต.ค.๔๘
เวลา ๑๑.๒๐

ที่ ศธ 0512.11/ 1925

คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
อาคารวิทยกิตติ์ ชั้น 12 ซอยจุฬา 64
เขตปทุมวัน กรุงเทพฯ 10330

28 กันยายน 2548

เรื่อง ขอความอนุเคราะห์ให้นิสิตเก็บรวบรวมข้อมูลการวิจัย

เรียน ผู้อำนวยการโรงพยาบาลภูมิพลอดุลยเดช

เนื่องด้วย นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ นิสิตขั้นปริญญาดุษฎีบัณฑิต คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย กำลังดำเนินการวิจัยเพื่อเสนอเป็นวิทยานิพนธ์ เรื่อง "กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก" โดยมี รองศาสตราจารย์ ดร.จินตนา ยูนิพันธุ์ เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ และผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา เป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ร่วม ในการนี้ใคร่ขอความอนุเคราะห์ให้นิสิตดำเนินการเก็บรวบรวมข้อมูลการวิจัย จากกลุ่มตัวอย่างผู้ที่แพทย์วินิจฉัยว่าเป็นมะเร็งลำไส้ใหญ่และทวารหนักที่การรักษาเสร็จสิ้นลงแล้ว 1 – 5 ปี จำนวน 30 คน โดยใช้แบบสัมภาษณ์ประสบการณ์การรักษามะเร็งลำไส้ใหญ่และทวารหนัก ทั้งนี้นิสิตจะประสานงาน เรื่อง วันและเวลา ในการเก็บรวบรวมข้อมูลการวิจัยอีกครั้งหนึ่ง

จึงเรียนมาเพื่อโปรดพิจารณาอนุเคราะห์ให้ นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ ดำเนินการเก็บรวบรวมข้อมูลการวิจัยดังกล่าว คณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่าน และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้

ทราบแล้ว
- กพย.รพ.ภูมิพลอดุลยเดช รอ.นพ.
ให้ตามระเบียบต่อไป
รับคำสั่ง ผอ.รพ.ภูมิพลอดุลยเดช รอ.นพ.
ทอ.เพิ่ม
รอง ผอ.รพ.ภูมิพลอดุลยเดช รอ.นพ.
๒๕ ต.ค.๔๘

ขอแสดงความนับถือ

สุกัญญา ประจุศิลป

(ผู้ช่วยศาสตราจารย์ ดร. สุกัญญา ประจุศิลป)
รองคณบดีฝ่ายจัดการศึกษา
ปฏิบัติราชการแทนคณบดีคณะพยาบาลศาสตร์

**สำเนาเรียน** หัวหน้าฝ่ายการพยาบาล
**งานบริการการศึกษา** โทร. 0-2218-9825 โทรสาร. 0-2218-9806
**อาจารย์ที่ปรึกษา** รองศาสตราจารย์ ดร. จินตนา ยูนิพันธุ์ โทร. 0-2218-9801
**อาจารย์ที่ปรึกษาร่วม** ผู้ช่วยศาสตราจารย์ ดร. จิราพร เกศพิชญวัฒนา โทร. 0-2218-9831
**ชื่อนิสิต** นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ โทร. 0-5044-6596

# APPENDIX B

คณะ... 169...
เลขที่ 3028
ว.ด.ป. 2 ก.ย. 48
เวลา 16.45

# บันทึกข้อความ

**ส่วนราชการ** คณะกรรมการพิจารณาจริยธรรมการวิจัยในมนุษย์ฯ จุฬาลงกรณ์มหาวิทยาลัย โทร.3501กค40

**ที่** กก.พิจารณาจริยธรรม/ 357 /2548 **วันที่** 25 สิงหาคม 2548

**เรื่อง** แจ้งผลพิจารณาจริยธรรมการวิจัย

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**เรียน** คณบดีคณะพยาบาลศาสตร์

จากการประชุมคณะกรรมการพิจารณาจริยธรรมการวิจัยในมนุษย์และการใช้สัตว์ทดลองในการวิจัย กลุ่มวิทยาศาสตร์สุขภาพ จุฬาลงกรณ์มหาวิทยาลัย ครั้งที่ 7/2548 เมื่อวันพฤหัสบดีที่ 25 สิงหาคม 2548 ที่ประชุมได้พิจารณารายละเอียดในโครงการวิจัย เรื่อง กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก (COPING PROGRESS WITH FEAR OF CANCER RECURRENCE AMONG THAI COLORECTAL CANCER SURVIVORS)

ของนาวาอากาศตรีหญิงวัชราภรณ์ เปาโรหิตย์ เป็นผู้วิจัยหลัก

ที่ประชุมมีมติให้ผ่านการพิจารณาจริยธรรมการวิจัยได้

จึงเรียนมาเพื่อโปรดทราบ

(รองศาสตราจารย์นายแพทย์ปรีดา ทัศนประดิษฐ)
ประธานกรรมการพิจารณาจริยธรรมการวิจัยในมนุษย์และการใช้สัตว์ทดลองในการวิจัย
กลุ่มวิทยาศาสตร์สุขภาพ จุฬาลงกรณ์มหาวิทยาลัย

# ใบยินยอมของประชากรตัวอย่างหรือผู้มีส่วนร่วมในการวิจัย
# (Informed Consent From)

ชื่อโครงการ กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก

เลขที่ ประชากรตัวอย่างหรือผู้มีส่วนร่วมในการวิจัย..............................................................................................

ข้าพเจ้าได้ทราบจากผู้วิจัยชื่อ นาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์

ที่อยู่ 1/6หมู่7 ซอยบัวอุทิศ ถนนเพิ่มสินออเงิน แขวงสายไหม เขตสายไหม กรุงเทพ10220

ซึ่งได้ลงนามด้านท้ายของหนังสือนี้ ถึงวัตถุประสงค์ ลักษณะ และแนวทางการศึกษาวิจัย รวมทั้งทราบถึงผลดี ผลข้างเคียง ที่อาจเกิดขึ้น ข้าพเจ้าได้ซักถาม ทำความเข้าใจเกี่ยวกับการศึกษาดังกล่าว นี้เป็นที่เรียบร้อยแล้ว

ข้าพเจ้ายินดีเข้าร่วมการศึกษาวิจัยครั้งนี้โดยสมัครใจ และอาจถอนตัวจากการเข้าร่วมศึกษานี้เมื่อใดก็ได้ โดยไม่จำเป็นต้องแจ้งเหตุผล และยอมรับผลข้างเคียง ที่อาจเกิดขึ้นและจะปฏิบัติตัวตามคำแนะนำของผู้ทำการวิจัย

ข้าพเจ้าได้รับทราบจากผู้ทำการวิจัยว่า หากข้าพเจ้าได้รับความผิดปรกติเนื่องจากการศึกษา ข้าพเจ้าจะได้รับความคุ้มครองทางกฎหมาย .และจะแจ้งผู้ทำการวิจัยทันที ในกรณีที่มิได้แจ้งให้ผู้ทำการวิจัยทราบในทันทีถึงความผิดปรกติที่เกิดขึ้น จะถือว่าข้าพเจ้าทำให้การคุ้มครองความปลอดภัยเป็นโมฆะ (ตามที่กฎหมายกำหนด)

ข้าพเจ้ายินดีให้ข้อมูลของข้าพเจ้ากับผู้วิจัย เพื่อเป็นประโยชน์ในการศึกษาวิจัยครั้งนี้

สุดท้ายนี้ ข้าพเจ้ายินดีข้าร่วมการศึกษานี้ ภายใต้เงื่อนไขที่ระบุไว้แล้วในข้างต้น

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สถานที่/วันที่ ลงนามประชากรตัวอย่างหรือผู้มีส่วนร่วมในการวิจัย

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(.........................................................................)

สถานที่/วันที่ ลงนามผู้วิจัยหลัก

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สถานที่/วันที่ ลงนามพยาน

## ข้อมูลสำหรับประชากรตัวอย่างหรือผู้มีส่วนร่วมในการวิจัย
## (Patient/ Participant information sheet)

1. ชื่อโครงการวิจัย กระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก
2. ชื่อผู้วิจัย นาวาอากาศตรีหญิงวัชราภรณ์ เปาโรหิตย์ นิสิตคณะพยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
3. สถานที่ปฏิบัติงาน วิทยาลัยพยาบาลทหารอากาศ

   โทรศัพท์ที่ทำงาน 02-534-2651 โทรศัพท์ที่บ้าน 02-994-0398

   โทรศัพท์เคลื่อนที่ 05-044-6596 E-mail:watcharaporn_nid@hotmail.com
4. ข้อมูลที่เกี่ยวข้องกับการให้คำยินยอมในการวิจัยประกอบด้วย คำอธิบายดังนี้

4.1 โครงการนี้ศึกษาเกี่ยวกับประสบการณ์ของผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก

4.2 วัตถุประสงค์ของการวิจัยเพื่อสำรวจ และอธิบายกระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำ ในผู้ป่วยรอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก และเพื่อสร้างแบบจำลองแนวคิดอธิบายกระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำ ในผู้ ป่วยรอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนัก

5. การวิจัยนี้เป็นการวิจัยเชิงคุณภาพ ที่กระทำในผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่และทวารหนักโดยที่ผู้วิจัยคาดว่าไมีความเสี่ยงใดๆ เกิดขึ้นกับผู้ร่วมวิจัย ซึ่งข้อมูลที่อาจระบุเชื่อมโยงหรือพาดพิงถึงผู้รอดชีวิตจากมะเร็งลำไส้ใหญ่ และทวารหนักจะถูกเข้ารหัส แถบบันทึกเสียง (tape) และเอกสารบันทึกการถอดเทปจะถูกจัดเก็บไว้ในที่ปลอดภัยและมิดชิด โดยแยกจากรหัสที่ใช้แทนชื่อผู้ป่วย

6. เพื่อลดความเสี่ยงอันตรายต่อผู้มีเข้าร่วมการ วิจัย ใบยินยอมของผู้มีส่วนร่วมในการทำวิจัยระบุไว้ว่าผู้เข้าร่วมกาวิจัยสามารถปฏิเสธที่จะเข้าร่วมหรือสามารถถอนตัวจากโครงการวิจัยได้ตลอดเวลา โดยการปฏิเสธที่จะเข้าร่วมการวิจัยครั้งนี้ไม่มีผล ต่อการได้รับการบริการหรือการดูแลจากบุคลากรในทีมสุขภาพที่ข้าพเจ้าได้รับแต่ประการใด

7. ระหว่างดำเนินการสัมภาษณ์ ผู้ร่วมวิจัยสามารถถาม หรือปฏิเสธการตอบคำถามได้

8. ผู้วิจัยมีการนัดหมายล่วงหน้าก่อนดำเนินการสัมภาษณ์ และเพื่อเปิดโอกาสให้ผู้เข้าร่วมวิจัยตัดสินใจเข้าร่วมหรีปฏิเสธ ผู้วิจัยโทรศัพท์เพื่อติดต่อยืนยัน การตัดสินใจ

9. หากผู้วิจัยมีข้อมูลเกี่ยวกับประโยชน์และโทษเกี่ยวกับการวิจัยครั้งนี้ ผู้วิจัยจะแจ้งให้ข้าพเจ้าทราบ โดยไม่ขัดข้อ

10. ข้าพเจ้าได้ทราบข้อมูลของโครงการข้างต้นตลอดจน ข้อดี ข้อเสีย ที่ได้รับจากการเข้าร่วมโครงการวิจัยครั้งนี้ และข้าพเจ้ายินยอมจะเข้าร่วมโครงการดังกล่าว

11. ไม่มีการจ่ายค่าตอบแทนให้แก่ผู้เข้าร่วมวิจัย

12. ผลการวิจัยจะนำเสนอในภาพรวม ส่วนชื่อและที่อยู่ผู้เข้าร่วมวิจัยจะได้รับการปกปิดอยู่เสมอ ยกเว้นว่าได้รับยินยอมไว้ โดยระเบียบและกฎหมายที่เกี่ยวข้องเท่านั้น จึงเปิดเผยข้อมูลแก่สาธารณชนได้ ในกรณีที่ผลการวิจัยได้รับกาตีพิมพ์

13. จำนวนผู้เข้าร่วมการ ในการวิจัยโดยประมาณในการวิจัยครั้งนี้ 30-50 คน

14. ในกรณีที่ผู้เข้าร่วมวิจัยได้รับผลกระทบกระเทือนด้วนจิตใจจากการสัมภาษณ์ ผู้วิจัยจะดำเนินการดังนี้

14.1 ยุติการสัมภาษณ์และให้การประคับประคองด้านจิตใจ

14.2 ประสานนักจิตวิทยาเพื่อประเมินสภาวะจิตใจและให้คำปรึกษา

14.3 ประสานงานกับจิตแพทย์ เพื่อการรักษาที่เหมาะสม

15. การติดต่อกับผู้วิจัยในกรณีที่มีปัญหา สามารถ ติดต่อได้ 24 ชั่วโมง กับผู้วิจัย คือ นาวาอากาศตรี หญิง วัชราภรณ์ เปาโรหิตย์ หมายเลข 05-044-6596

# APPENDIX C

**คำถามที่ใช้ในการสัมภาษณ์**

สวัสดีค่ะ ดิฉันนาวาอากาศตรีหญิง วัชราภรณ์ เปาโรหิตย์ นิสิตปริญญาเอกคณะ พยาบาลศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ดิฉันมีความสนใจที่จะทำการศึกษาเกี่ยวกับ ประสบการณ์ ของคุณภายหลังการรักษามะเร็งลำไส้ใหญ่และทวารหนักว่ามีอะไรเกิดขึ้น เท่าที่ผ่านมาต้องเผชิญกับปัญหาด้านจิตใจอะไรบ้าง มีความรู้สึกอย่างไร มีวิธีการในการแก้ปัญหาอย่างไร ผลการแก้ปัญหาเป็นอย่างไร โดยใช้เวลา40-60 นาที เพื่อซักถามและสัมภาษณ์ การศึกษานี้จะช่วยให้พยาบาลและบุคคลากรในทีมสุขภาพมีความรู้ ความเข้าใจถึงปัญหาด้านจิตใจและการเผชิญปัญหาภายหลังรับการรักษามะเร็งลำไส้ใหญ่และทวารหนัก ผลของการวิจัยสามารถใช้เป็นข้อมูลพื้นฐานที่สำคัญ สำหรับพยาบาลและเจ้าหน้าที่ในทีมสุขภาพ เพื่อช่วยส่งเสริมความสามารถในการแก้ปัญหาด้านจิตใจและช่วยให้เกิดการปรับตัวที่ดีในการดำรงชีวิตภายหลังการรักษา มะเร็งลำไส้ใหญ่และทวารหนัก ข้อมูลทุกอย่างจากการสัมภาษณ์ จะถูกจัดเก็บไว้เป็นความลับ และถูกทำลายภายหลังจากการวิจัยแล้วเสร็จ

**ข้อมูลส่วนบุคคลจากการบันทึกประวัติทางการแพทย์**

1. การวินิจฉัยโรคมะเร็งลำไส้ใหญ่และทวารหนักขั้นที่...........................................................
2. ประวัติการรักษาโรคมะเร็งลำไส้ใหญ่และทวารหนักที่ได้รับ...............................................
3. ระยะเวลาหลังการรักษา..........................................................................................
4. การเจ็บป่วยร่วม...................................................................................................

คำถามที่ไปเกี่ยวกับข้อมูลส่วนบุคคล

1. ขณะนี้อายุเท่าไรคะ ..............................................................................................
2. นับถือศาสนาอะไรคะ..............................................................................................
3. การศึกษาสูงสุดระดับใดคะ.......................................................................................
4. สถานภาพสมรสอะไรคะ ..........................................................................................
5. อาชีพอะไรคะ.......................................................................................................
6. การดำเนินชีวิต.......................................................................

สิ่งที่สังเกตเห็น....................................................................................................
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**คำถามเพื่อการสัมภาษณ์**

**เพื่ออธิบายกระบวนการเผชิญปัญหาการกลัวเป็นมะเร็งกลับซ้ำภายหลังการรักษา**

คำถามเกี่ยวกับประวัติความเจ็บป่วย

1. ได้รับการวินิจฉัยว่าเป็นโรคนี้มานานเท่าไรแล้ว……….. ……………………
2. รู้สึกเหมือนอะไรเมื่อรู้ว่าเป็นโรคนี้……………………………………………………
3. คิดว่าเกิดจากอะไร…………………………………………………………………

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4. ได้รับการรักษาอะไรบ้างเกี่ยวกับโรคมะเร็งลำไส้ใหญ่และทวารหนักคะ…………………………

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5. การรักษาเกี่ยวกับโรคนี้สิ้นสุดลงนานเท่าไรแล้วคะ…………………………………………
6. คิดอย่างไรกับผลการรักษา…………………………………………………………..

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7. ผลการพบแพทย์ครั้งสุดท้าย เป็นอย่างบ้างคะ……………………………………………………..
8. มีโรคประจำตัวอื่นๆไหมคะ…………………………………………………………………

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9. ความคิดคำนึงห่วงใยที่สุดหลังการรักษาคือ………………………………………………

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10. ช่วยอธิบายการกลัวเป็นมะเร็งกลับซ้ำว่ามันเหมือนกับอะไร………………………………

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11. ช่วยเล่าให้ฟังว่าได้ทำอย่างไรเมื่อเกิดความกลัวมะเร็งกลับซ้ำ…………………………………..

…………………………………………………………………………………………..

12. หรือทำอย่างไรจึงไม่กลัว……………………………………
13. ทำอย่างไรจึงคิดว่ามะเร็งจะไม่กลับมาอีก…………………………………………………

…………………………………………………………………………………………..

14. มีวิธีการอะไรบ้าง ……………………………………ไม่ค่อยเข้าใจช่วยอธิบาย……………
15. ขณะนี้ภาวะสุขภาพเป็นอย่างไร กาย ……………………………………………………..

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จิตใจ………………………………………………………………………………...

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ปฏิสัมพันธ์กับเพื่อน…………………………………………………………………

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# APPENDIX D

# CURRICULUM VITAE

Name : Squadron Leader Watcharaporn Paorohit

Born : 4 March 1959

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Education:

| | |
|---|---|
| Certificate in Nursing and Midwifery | 1978 |
| Bachelor of Education (Nursing Education) | 1988 |
| Master of Nursing Science | 1994 |
| Certificate in Statistical Analysis, National Research Council | 1995 |
| Certificate in Wound and Ostomy Care | 1998 |
| Certificate in Oncology Nursing,<br>Peter MacCallum, Cancer Nursing Research Center | 2004 |

Published Research

| | |
|---|---|
| Curriculum Evaluation: Bachelor of Nursing Science,<br>Royal Thai Air Force (Academic year 1994-1998) | 2000 |
| Follow up Study Registered Nurse (Academic year 2000) | 2001 |
| Philosophy and Objective Development:<br>Bachelor of Nursing Science Program, Royal Thai Air Force Nursing College. | 2002 |