

Research Article

The meaning of complementary therapy from the perspective of Thai women with breast cancer

Piriyalux Sirisupluxana, RN, PhD(Cand),¹ Kasara Sripichyakan, RN, PhD,¹ Tipaporn Wonghongkul, RN, PhD,¹ Hunsu Sethabouppha, RN, PhD,¹ and Penny F. Pierce, RN, PhD, FAAN²
¹Faculty of Nursing, Chiang Mai University, Thailand and ²School of Nursing, University of Michigan, Ann Arbor, Michigan, USA

Abstract

A qualitative study based on Heideggerian phenomenology was conducted with 17 Thai women who had survived breast cancer and had utilized at least one type of complementary therapy. The study explored the meaning of such therapy and the data were collected by an in-depth interview, a demographic data-recording form, and a reflective journal. The data were analyzed by using an interpretative process that was described by Cohen, Kahn, and Steeves. Six themes were generated in relation to the meaning of complementary therapy as perceived by the participants: cancer-controlling treatment; mental strengthening; mind and body therapy; self-determination; natural therapy; and conventional therapy integration. The knowledge gained from this study will help health-care providers better understand the role that complementary therapies play in the lives of women whose lives are threatened by cancer. It is important for health-care providers to be more proactive in the culturally sensitive promotion of using complementary therapies based on the women's values and preferences.

Key words

breast cancer, complementary therapy, Heidegger, phenomenology, Thailand.

INTRODUCTION

Complementary therapies (CTs) have become popular, as they are more compatible with people's values, spirituality, and religious or philosophical beliefs regarding the nature of health and illness (Smith, 2004), and can be found in many different countries. They are alternatives for women who view conventional treatments with dissatisfaction or consider these to be harmful, weakening one's immune system and having poor health outcomes (Shumay *et al.*, 2001). Complementary therapies can be defined as those treatments that can be given alongside conventional cancer treatments (Adam & Jewell, 2007). They also are viewed as a bridge leading to holistic health (Hatthakit *et al.*, 2004) and there are a number of widely used CTs, such as herbs, nutritional supplements, and massage (Shumay *et al.*, 2001; Shen *et al.*, 2002; Pintobtang S., 2002, unpubl. data).

Nursing research regarding CTs for women with breast cancer from different countries, including Thailand, has focused on the prevalence and reasons for using such therapy (Wonghongkul *et al.*, 2002; Kaewvilai W., 2004, unpubl. data), but there is still limited research in Thailand regarding the use of CTs. Common reasons are to cure or prevent cancer, decrease the side-effects of conventional medicine, increase immunity, enhance physical, emotional, or spiritual well-

being, and to gain a sense of control (Verhoff *et al.*, 1999). It is argued here that most previous Thai studies were based on Western theoretical concepts that do not fit with Thai values. They also might be inapplicable if they originate from a sociocultural system that is quite different to Thai culture. Therefore, this study's purpose was to explore the meaning of CT from the perspective of Thai women with breast cancer so that the knowledge gained could be used by nursing practitioners to provide more holistic care to such women.

BACKGROUND

Breast cancer is the most frequent cancer among Thai women (National Cancer Institute Thailand, 2002) and, from 2000 to 2006, 3162 women received this diagnosis (National Cancer Institute Thailand, 2006). The incidence of breast cancer has increased annually in Thailand, but has been found mostly in Bangkok (Martin & Cheirsilpa, 2003) because most women have been living in and visiting hospitals in Bangkok. It is postulated that women in the rural and remote areas of Thailand do not have the same access to diagnosis or treatment and, therefore, there might be a paucity of accurate statistics. Moreover, women often experience physical, psychological, or spiritual issues due to the diagnosis and various treatments (Crane-Okada & Loney, 2007).

The usage of CTs among breast cancer survivors is prevalent in some Western countries and the rates vary. For example, in the USA, 69% (Burstein *et al.*, 1999) to 73%

Correspondence address: Piriyalux Sirisupluxana, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand. Email: sirisupluxana@yahoo.com
Received 15 August 2008; accepted 29 September 2008

(Shen *et al.*, 2002) of women use CTs. In Italy, 16.5% began using CTs after a breast cancer diagnosis, using it independently or following conventional treatments (Corcetti *et al.*, 1998). In Japan, 96.2% of cancer patients use mushrooms, herbs, and shark cartilage as CTs (Hyodo *et al.*, 2005). Moreover, 86.7% of Chinese women with breast cancer employ traditional Chinese medicine, 84.8% use other supplements, 65.5% use physical exercises, and 4.9% use acupuncture. Women perceive the effectiveness of using Chinese and herbal medicine (Cui *et al.*, 2004).

One unpublished survey in Thailand showed that 84.6% of women with breast cancer use CTs, with 76.5% using at least one kind and 27.8% using three kinds of CTs. Thai women use various types of CT from diagnosis until the preoperative stage (48.6%), during the operative period (21%), and during chemotherapy treatment (19%) (Kaewvilai W., 2004, unpubl. data). Another study found that survivors take herbal medicines (38.1%), change their nutrition (36.5%) or lifestyle (31.7%), or practice prayer (16.8%) to improve their quality of life (Wonghongkul *et al.*, 2002). The development of CTs in Thailand has struggled over the past few decades, but the movement towards an integrative health-care model that incorporates CTs has been encouraged through the Department for Development of Thai Traditional and Alternative Medicine since 1997. Some nurses have begun now to incorporate CTs into their nursing practice but are often reluctant to do this where the medical model still prevails (Hatthakit *et al.*, 2004).

Nurses view CTs as another treatment modality used to tackle health problems and see them as a link to holistic health (Hatthakit *et al.*, 2004). However, to our knowledge, the meaning of CTs from the perspective of women with breast cancer has not been researched in Thailand before and this is needed to assist health-care providers to better understand the importance of such therapy and to assist with future care planning. Therefore, this study focused on the research question: What is the meaning of CT from the perspective of Thai women with breast cancer?

METHOD

Research design

A qualitative, exploratory, and descriptive design was chosen to gather data about the meanings and experiences of CT for the Thai women.

Participants

The participants were 17 Thai women with breast cancer who obtained health services at the National Cancer Institute, Thailand, and other health-care centers in the Bangkok metropolitan area. Purposive sampling and snowball techniques were used to recruit the participants. The inclusion criteria included women who were: (i) aged from 20–60 years old; (ii) diagnosed with breast cancer; (iii) at any stage of breast cancer; (iv) used or were currently using CTs; (v) spoke Thai; and (vi) willing to participate. The exclusion criteria included severe physical or mental health problems.

Data collection

Information about the participants was collected using a Demographic Recording Form developed by the first researcher. This included items for age, level of education, occupation, religion, race, monthly income, marital status, and treatment history. A tape recorder was used to record the interviews and the first researcher also utilized a reflective journal to record her reactions, feelings, problems, and plans for further sessions, as well as issues of potential bias.

In the in-depth, semistructured interviews, mostly open-ended questions were used to gain the participants' perceptions of the self and their life, thoughts, feelings, and experiences of using and choosing CTs. The broad statements and questions that were used as a basis for all the interviews were:

- Please describe your experience in using CTs.
- Which CTs did you use?
- When did you start using CTs?
- How did you feel after using CTs?
- What do CTs mean to you?

Each participant had two-to-four interviews in order to clarify the questions that were missed earlier and to gain further in-depth information. The duration of each interview ranged from 45–90 mins. The building of rapport was continued throughout the study. All the interviews were recorded with permission from the participants and transcribed verbatim. Attentive and non-judgmental listening techniques were used during the interviews.

Data analysis

Heideggerian interpretive phenomenological methodology was used in this study to understand how women with breast cancer using CTs interpreted their own life experiences. Interpretive phenomenology is both a philosophy and a methodology that is used to analyze the meaning in everyday life (Heidegger, 1962).

The data were concurrently analyzed and guided by the interpretative process described by Cohen *et al.* (2000). The transcripts of the interviews and reflective journal entries were read several times to get a sense of each participant's contextual background, history, and relevancy. The data were manually coded line by line and sorted by category. The categories then were sorted into themes according to their similarities and relationships. The themes were validated with the participants and advice also was sought from an advisory dissertation committee to ensure that the appropriate meaning was assigned.

Ethical considerations

This study was approved by the Research Ethics Committee of the Faculty of Nursing, Chiang Mai University, and the National Cancer Institute, Thailand. All explanations of the study, objectives, benefits, confidentiality, anonymity, and risks were provided to all the participants and written consent was obtained. The transportation expenses were reimbursed and each participant was given a small gift to

express the researchers' appreciation. Moreover, the audiotapes, transcripts, and reflective journal were destroyed once the study was completed as part of the first author's doctoral dissertation.

Trustworthiness

The trustworthiness of the data and interpretation of the findings were based on the scientific criteria proposed by Lincoln and Guba (1985), including credibility, transferability, and dependability. Debriefing was conducted twice with the advisory dissertation committee and qualitative research experts for data analysis credibility. Member checking was established with the 17 participants to confirm the findings and confirm the researcher's interpretations. Transferability was established by displaying the thick description of the data, study process, the overall interpretation process, and the results to understand the phenomena. Dependability was promoted by conducting pilot interviews with three participants to firm up the interview questions. The quotations, which were the explanation of the themes, categories, and subcategories, enhanced confirmability.

FINDINGS

Demographic information

The participants were 17 Thai women aged from 37–60 years. Fifteen of the participants were Buddhist and at least 12 had a bachelor degree. Six of the participants were unemployed or retired while seven worked within the government sector. The monthly income ranged from 3000–60 000 Thai Baht (\$US90–1818). Nine of the participants were married, six were single, and two were divorced or widowed. Sixteen of the participants lived in or near Bangkok. Eight of the participants were in the second stage of breast cancer and had no recurrence. Nine had cancer for < 5 years. Fourteen of the participants had no other present illness and sixteen had no previous illness.

The results revealed six themes in relation to the meaning of CT: (i) cancer-controlling treatment; (ii) mental strengthening; (iii) mind and body therapy; (iv) self-determination; (v) natural therapy; and (vi) conventional therapy integration.

Theme 1: Cancer-controlling treatment

Complementary therapies were perceived as the treatment that could control breast cancer from spreading or recurring by four methods: eliminating toxins, taking cancer-inhibiting substances, starving the cancer, or strengthening immunity.

Eliminating toxins

In this category, the women believed that their cancer could spread if there were internal toxins. Toxins could originate from the cancer itself or from conventional treatments, like

chemotherapy. Toxin elimination methods included detoxification and eating three kinds of mushrooms. For example, two of the participants said:

I ate straw mushrooms, wood ear mushrooms, or shiitake mushrooms. They cleaned out toxins from the anticancer drugs . . . Eating all three kinds of mushrooms made toxins present in my stools and stopped cancer cell growth.

I applied coffee to detoxify my body and wash out rotten cells or toxins.

Taking cancer-inhibiting substances

This referred to taking anticancer agents, such as antioxidants or beta-carotene, to control the cancer from spreading or recurring. Some participants took vitamins and other products, such as selenium, shark cartilage, or flower pollen, as one participant said:

I began taking vitamins A, C, and E, shark cartilage and bee pollen. These were antioxidants for controlling the spread of cancer and inhibiting cell growth.

Starving the cancer

This referred to prohibiting cancer growth by dietary restrictions based on the participants' belief that cancer could grow rapidly by eating food, including meat, sweets, fatty foods, seafood, or fermented foods, which are a favorite of cancer, as a participant stated:

I stopped eating meat and fatty foods. I cooked with olive oil and I pushed away cancer-enhancing food, like chicken, bamboo shoots, and pickled food. They are bad for our bodies. They are favorite foods for cancer. Cancer may grow faster if I eat these foods. So, I stopped feeding the cancer to kill it.

Strengthening immunity

Some of the participants believed that the cancer was caused by and spread by one's immunity. Conventional therapy affected their immunity in terms of weakening or decreasing health but this could be strengthened by eating fruits and vegetables. For example, a participant said:

Weak immunity is caused by cancer, medical treatment, and toxic foods. I worried that cancer could return, so I started drinking vegetable and fruit juices and eating natural process foods to increase my immunity. I think this will control any cancer recurrence and make me healthier.

Theme 2: Mental strengthening

Complications from conventional therapy made women with breast cancer fearful, hopeless, and powerless. Complementary therapy was a crucial approach that increased the

participants' mental powers, cheerfulness, hopefulness, and confidence, as explained by this participant:

I'm overwhelmed with stress and thought I was going to die. I had no strength to go on. Then, I looked for other means of treatment instead of surgery. I chose a method that gave me some strength and mental power. Folk medicines made me feel better, gain power and confidence. I became cheerful and relaxed. It helped me spiritually and psychologically.

Being cheerful

Cheerfulness referred to the feelings of mental strength in order to fight cancer and its complications. For example, a participant felt worried and fearful when she knew that she had cancer; then, she practiced Dharma and meditation to better cope with her cancer and conventional treatments. Dharma is the doctrine or the teachings of the Buddha that lead to enlightenment (Tanphaichitr, 2006). One of the women said:

Cheerfulness is important. I can fight cancer and radiation therapy because I practice Dharma. It reduces my worries and fear. I feel better. I feel positive to fight this disease.

Being hopeful

The fact that conventional treatment alone might not always cure cancer often led to feelings of hopelessness in the participants. Therefore, they looked for new hope from CT. Being hopeful meant feeling good, expecting to be cured, and getting better; for example, one participant stated:

Peking grass can heal cancer. This belief gives me hope . . . Being hopeful makes me have mental strength to fight the disease. It helps spiritually and psychologically. It can make me healthier.

Being confident

Confidence was essential for the participants' ability to live normally. From their experience, CTs made them confident to fight cancer and the side-effects from conventional treatment or to accept the truth about their illness. The participants with Stage I and II breast cancer had confidence when they meditated; for example, a participant explained:

Meditation practice helped me develop my confidence to fight the disease. It forced me to adapt physically, emotionally, and socially in accepting the illness.

Theme 3: Mind and body therapy

This theme referred to a CT that treats both the body and the mind, as some participants believed that these were connected. Complementary therapy includes concurrently treating the mind and body and healing mind to healing body.

Treating the mind and the body

This category referred to treating the mind and body concurrently. The participants believed that the cancer would affect

both the mind and the body; therefore, a combination of methods that could cure both physically and mentally was preferred. For example, one participant stated:

The treatment must be integrated. I practice religious meditation along with conventional treatment. I changed my diet, exercised, meditated, and prayed. I adopted all simultaneously, so it's hard to tell which improves my health. If I let the illness control my mind, my physical condition worsened.

Healing mind to healing body

This involved the process of bringing both the mind and body together, leading to a state of equilibrium. The participants sought CTs that could cure their mind and improve their physical health. An educated participant believed that when her mind was healthy, her body would release endorphins to control her cancer. Therefore, she employed prayer and meditation and indicated that:

I pray and meditate. It makes my mind tranquil. It keeps my feelings constant. Then, my brain releases endorphin, making me happy. When the mind is happy, so is the body . . . thus, my immunity will improve.

Theme 4: Self-determination

Self-determining CT was considered to be a treatment where the participants could select their healers, therapies, and duration independently. The categories included the freedom to choose one's healers and therapies and to use or stop therapies.

Freedom to choose one's healers

One participant used ancient Chinese therapies and appreciated her freedom to choose, stating that:

I think CT should be chosen freely. I perform tai chi after radiation treatment. I meet with the original creator [Chinese healer] of tai chi and practice meditation because I believe she can help me relax. My cancer doesn't worsen.

Freedom to choose one's therapies

Women had the freedom to choose which type or method of CT they preferred; for example, one stated:

Using CTs, I'm doing something for myself. I decided to use *Phlu-Khao*. My health improves and my sickness disappears.

Freedom to use or stop therapies

The participants mentioned that CT gave them freedom in treatment if they found it was effective or to stop it if it was ineffective. One said:

I gave up the herb pot! My sister brought a herb pot to me but I rejected it. I later used it, but I felt worse. I was so weak, so I went to the doctor. Then, I stopped using herb pot medicine. I feel much better with chemotherapy now.

Theme 5: Natural therapy

Natural therapy emerged from the perceived attributes of CT that were derived from nature, easy and convenient, and compatible with one's lifestyle.

Being derived from nature

The products used in the therapies come from nature, so there are neither contaminants nor toxins:

Nature therapy is so natural, involving no toxics. Organic fruits and vegetables represented my CT.

Convenient and easy method

The participants believed that CTs are convenient and easy methods: easily accessed, simple, painless, and no complicated rules to follow:

I drink Asiatic pennywort juice whenever I want. It's not complicated at all. I think this herb is natural.

Compatible with one's lifestyle

Complementary therapy reflects one's attitudes and values and is compatible with one's lifestyle and personal preference, as one woman explained:

The natural way means that I live my own life. It fits with my daily life and within the nature of living. For example, I have to balance my eating according to human nature and nutritional needs.

Theme 6: Conventional therapy integration

The participants expressed that CT could be used in a number of ways. These included as a main treatment, as a supplementary treatment, or as a combination with conventional treatments. The participants believed that CT as a main treatment was more important or more reliable than conventional therapy and chose to use CT first as they thought that it could cure the disease. One participant explained:

My main treatment comes from herbal medicines and herbal massage because I believed my folk healer could cure me... The modern method of chemotherapy is another kind of treatment. I might use it as a supplement in case herbal medicine isn't effective.

Conventional therapy could be used as the supplement. Nine of the participants utilized conventional treatment as their main therapy before switching to CT. Believing that the former was more effective, one participant said

Initially, I relied on the doctor's treatment because I must remove the lump first. If not completely cured, then I used *Chee-Wa-Jit* as a supplement. I started it postoperatively but before radiation because it might help me become healthier.

The participants' choices of treatment also were categorized into a combination of complementary and conventional methods as they believed in their equal effectiveness. Both could be used simultaneously or separately, as one participant explained:

The combination of the two methods is advantageous. I believe the treatments have to be mixed. If I rely on only one, it might not be as effective. The two treatments should be done together.

DISCUSSION

The findings of this study were generated by a small group of women with breast cancer, the majority of whom had high educational backgrounds and socioeconomic status. This limits the transferability of the findings to other women with breast cancer. However, the themes identified in this study corroborate the findings of others using CTs in Thailand such as complementary therapy was to help expel the toxins (Intarakamhang, 1998), mental well-being might improve immunity (Chungsatiensap, 1999). The participants reflected on four methods to control breast cancer: eliminating toxins, taking cancer-inhibiting substances, starving the cancer, or strengthening immunity. These beliefs were also substantiated by other complementary therapists (Thirasiri, 2005).

Toxins were perceived as being produced by cancer, chemotherapy, and radiation therapy. The results from one study showed that women with breast cancer used CTs "to help expel the toxins" (Kaewvilai W., 2004, unpubl. data). The participants in this study also used CTs to improve their immunity. These findings were congruent with Western studies (Boon *et al.*, 2000) and another Thai study (Sungsing *et al.*, 2007). The immune system is responsive to psychological factors and psychological distress (Park & Kang, 2006). High psychological stress levels can decrease natural killer cell activity, T-cell responses, and other cellular responses that are related to cancer progression (Andersen *et al.*, 1998).

Based on the participants' beliefs, experiences, and knowledge, they consumed various nutritional substances. Some participants used *Tian-Xain*, a traditional Chinese herbal medicine that has been used as a complementary anticancer agent, to improve their immunity and act as an anticancer agent (Chen-Kuo, 2001). In China, it has been argued that this is congruent with scientifically-based, traditional treatment (Chi-Yuan, 2005). In modern medicine, immunity is a defense mechanism against tumors and has the potential to destroy breast cancer cells (Park & Kang, 2006). However, the evidence for CT in building immunity is not well known. Some participants also used *Chee-Wa-Jit*, which is a widespread herbal food used as a rejuvenating liquid concoction. This believe it emphasizes the interaction between the body and mind in human life and health (Intarakamhang, 1998; Chungsatiensap, 1999). Another nutritional substance used was

Phlu-Khao, a heart-shaped herb with a fleshy smell, used by Thais to dry up pus and treat skin disease. The extracts have been used by patients with cancer who believe that it might heal cancer. It is used also as a supplementary drink during radiation treatment (Pornsiriphong *et al.*, 1996).

The participants perceived that using CTs had a significant role in antioxidant and immune biological functions related to cancer. Hence, they consumed vitamins A, C, and E, vegetables, fruits, and herbs. Herbs are considered to be an important substance in promoting and maintaining the physical health of Thai people (Thirasiri, 2005). Antioxidants and beta-carotene substances, found in vitamins, fruits, vegetables, herbs, and some herbal medicines, have protective immunity cell differentiation (Peckenpaugh & Poleman, 1999). Antioxidants also defend the body from cellular damage by ending the free-radical chain reaction (Works, 2000) or by controlling the harmful free radical molecules and preventing many common diseases (Keegan, 2002). Thus, CTs have been recognized as a cancer-inhibiting substance and are seemingly congruent with modern medicine.

The participants in this study ate vegetarian food and avoided meat, a matter that is also incongruent with modern medicine. They also should have ingested ample protein, fats, carbohydrates, vitamins, minerals, and fluids to meet the increased energy demands of a high metabolic rate, to prevent weight loss, to rebuild the body, and to promote a sense of well-being during cancer treatment (Peckenpaugh & Poleman, 1999). This finding reflects that the women with breast cancer in this study still needed information regarding nutrition.

It has been argued that CTs help patients deal with the emotional and psychological aspects of cancer, such as stress, anxiety, and depression (Adam & Jewell, 2007). The participants used CTs for mental strengthening because they lost hope in conventional therapies. Furthermore, the primary reason for using alternative therapy was to help control the emotional and physical effects of cancer (Long M., 2003, unpubl. data). Finally, Janes (2002: 281) pointed out that "... where biomedicine fails, or when treatment generates serious side effects, people may seek alternatives ... which promises to bring cultural meaning to a condition and its perceived cause". The participants also described CT as a mind and body therapy. Pornsiriphong *et al.* (1996) explained that, when one is sick, the mind and body need treatment. Modern medicine also acknowledges the concept of the mind-body connection (O'Beirne *et al.*, 2004); however, it is argued here that a lack of trust in conventional medicine and negative outcomes often turn patients towards CTs.

Self-determining therapy provided the participants with freedom to choose their preferred methods, healers, and duration of therapy. Complementary therapies are "... often not about cancer treatment but about feeling better and about having greater control over one's destiny" (Burstein, 2000: 2503). Our participants chose to use herbal pallets, vitamins, or shark-cartilage because they could handle their own illness and had the right to choose what would bring them benefit. One's desire to control might stem from one's feeling in treatment decision-making (Montbriand, 1995).

Moreover, CTs might fit with a patient's desire for more empowerment (Riessman, 1994).

Complementary therapies are derived from nature and are convenient and compatible with one's lifestyle. Women with cancer have consumed fresh fruit and vegetables to neutralize the cancer and they chose CT because it had fewer toxins (Cassidy, 2003). Our participants preferred the natural means and safety of CTs and correspondingly altered their way of life (O'Beirne *et al.*, 2004).

The findings of this study reflected that CTs were used as: (i) a main treatment; (ii) a supplement of conventional therapy; and (iii) a combination with conventional therapy. Complementary therapies are defined as adjuncts to the conventional treatments. Moreover, our findings can be positively compared with those of the American Cancer Society (2000), in that CTs are supportive methods used to complement evidence-based treatment. The participants believed that CTs could cure cancer (Ramitanont, 2006), so they used CTs combined with conventional treatment. Although CTs have not been proven to cure disease, they help to control the symptoms and improve well-being (Brown *et al.*, 2001). The participants were found to have used CTs as their main treatment to alleviate the side-effects of conventional treatment.

CONCLUSION

The findings from this study contribute to health-care provider understanding of the personal beliefs of women with breast cancer and the types of CT used by the participants under study. Particularly, women should be educated about the causes and treatment of cancer, especially the relationship between nutrition and cancer growth. Mind-body therapies engage the use of the mind to enhance body function. Safe and mentally stimulating CTs, such as prayer, meditation, and spirituality, could be promoted within clinical settings for healing of the mind and body. Nursing administrators should consider integrating CTs into nursing policies and practices and develop guidelines for implementation. Education about CTs needs to be included within the holistic education of nursing students and in continuing education programs for nurses in order to produce nurse specialists. In particular, it is argued that CT training has the potential to enhance the repertoire of caring practices of oncology nurses. Finally, it is imperative that further triangulated research be undertaken to replicate the studies of women with breast cancer, including a range of socioeconomic backgrounds, education levels, and different geographic areas in order to broaden the generalizability of the findings regarding the use, beliefs, and experiences of CT.

ACKNOWLEDGMENTS

The authors would like to thank the women's willingness to participate, the advisory committee's dedication, and the reviewers' assistance in bringing this study to fruition. Appreciation also is extended to the Thai Health Promotion Foundation and the Graduate School, Chiang Mai University, Thailand, for giving support with research funding.

REFERENCES

- Adam M, Jewell AP. The use of complementary and alternative medicine by cancer patients. *Int. Semin. Surg. Oncol.* 2007; **4**: 1–7.
- American Cancer Society. *Guide to Complementary and Alternative Cancer Methods*. Atlanta, GA: American Cancer Society, 2000.
- Andersen BL, Farrar WB, Golden-Kreutz D *et al.* Stress and immune responses after surgical treatment for regional breast cancer. *J. Natl Cancer Inst.* 1998; **90**: 30–36.
- Boon H, Stewart M, Kennard M *et al.* Use of complementary/alternative medicine by breast cancer survivors in Ontario: prevalence and perceptions. *J. Clin. Oncol.* 2000; **18**: 2515–2521.
- Brown J, Byers T, Thompson K, Eldridge B, Doyle C, Williams AM. Nutrition during and after cancer treatment: A guide for informed choice by cancer survivors. *CA: Cancer J. Clin.* 2001; **51**: 153–181.
- Burstein HJ. Discussing complementary therapies with cancer patients: what should we be talking about? *J. Clin. Oncol.* 2000; **18**: 2501–2504.
- Burstein HJ, Gelber S, Guadagnoli E, Weeks J. Use of alternative medicine by women with early-stage breast cancer. *N. Engl. J. Med.* 1999; **340**: 1733–1739.
- Cassidy A. Are herbal remedies and dietary supplements safe and effective for breast cancer patients? *Breast Cancer Res.* 2003; **5**: 300–302.
- Chen-Kuo W. *The Cancer Terminator*. Hong Kong: Tai Check, 2001.
- Chi-Yuan Y. A clinical trial to evaluate the effects of Chinese medicine Tian-Xian Liquid on the immunity of cancer patients. *Symposium conducted at the First International Thai Conference on the Integrative Management of Cancer Worldwide Experience*; 16–18 March, 2005; Chonburi: Thailand, The Free Radical Biology & Medical Research Center, 2005.
- Chungsatiensap K. [*What does Holistic Phenomena tell the Thai Society?*] Bangkok: Komol Kheemthong Foundation, 1999 (in Thai).
- Cohen MZ, Kahn DL, Steeves RH. *Hermeneutic Phenomenological Research: A Practical Guide for Nurse Researchers*. Thousand Oaks, CA: Sage, 2000.
- Corcetti E, Crotti N, Feltrin A, Ponton P, Geddes M, Buiatti E. Complementary therapy for breast cancer. *Eur. J. Cancer* 1998; **34**: 324–328.
- Crane-Okada R, Loney M. Breast cancers. In: Langhorne ME, Fulton JS, Otto SE (eds). *Oncology Nursing*. Missouri, MO: Mosby, 2007; 101–120.
- Cui Y, Shu XO, Gao Y *et al.* Use of complementary and alternative medicine by Chinese women with breast cancer. *Breast Cancer Res. Treat.* 2004; **85**: 263–270.
- Hatthakit U, Parker M, Niyomthai N. Nurses' experiences in integrating complementary therapies into nursing practice. *Thai J. Nurs. Res.* 2004; **8**: 126–141.
- Heidegger M. *Being and Time*. London: SCM Press, 1962.
- Hyodo I, Amano N, Eguchi M *et al.* Nationwide survey on complementary and alternative medicine in cancer patients in Japan. *J. Clin. Oncol.* 2005; **23**: 2645–2654.
- Intarakamhang S. [*Cheewajit: Understanding Natural Life*.] Bangkok: Amarin Printing and Publishing, 1998 (in Thai).
- Janes CR. Buddhism, science, and market: the globalization of Tibetan medicine. *Anthropol. Med.* 2002; **9**: 267–289.
- Keegan L. *Healing Nutrition* (2nd edn). Albany, New York: Delmar Thomson Learning, 2002.
- Lincoln YS, Guba EG. *Naturalistic Inquiry*. Newbury Park, CA: Sage, 1985.
- Martin N, Cheirsilpa A. Breast cancer. In: Sriplung H, Sontipong S, Martin N *et al.* (eds). *Breast cancer ICD 10 C50: Cancer in Thailand, Volume IV 1995–1997*. Bangkok, Thailand: Bangkok Medical, 2003.
- Montbriand MJ. Decision tree model describing alternate health care choices made by oncology patients. *Cancer Nurs.* 1995; **18**: 104–107.
- National Cancer Institute Thailand. *Annual Report, 2002*. Bangkok: Medical Record Department, 2002.
- National Cancer Institute Thailand. *Annual Report, 2006*. Bangkok: Medical Record Department, 2006.
- O'Beirne M, Verhoef M, Paluck E, Herbert C. Complementary therapy use by cancer patients: Physicians' perceptions, attitudes, and ideas. *Can. Fam. Phys.* 2004; **50**: 882–888.
- Park NJ, Kang DH. Breast cancer risk and immune responses in healthy women. *Oncol. Nurs. Forum* 2006; **33**: 1151–1159.
- Peckenpaugh NJ, Poleman OM. *Nutrition Essentials and Diet Therapy* (8th edn). Philadelphia: W.B. Saunders, 1999.
- Pornsiriphong S, Usupharat P, Sapcharoen P. [*Study of Folk Wisdom of Thai Folk Doctor, Pho Yai Ken Lawong*.] Bangkok: Sahathamik, 1996 (in Thai).
- Ramitanont C. [*Beliefs and Rituals of Hill-tribe in Thailand*] (8th edn). Bangkok: Sukhothaimathirath, 2006 (in Thai).
- Riessman F. Alternative health movements. *Soc. Policy* 1994; **24**: 53–57.
- Shen J, Andersen R, Albert PS *et al.* Use of complementary/alternative therapies by women with advanced-stage breast cancer. *BMC Complement. Altern. Med.* 2002; **2**: 1–7.
- Shumay DM, Maskarinec G, Kakai H, Gotay CC. Why some cancer patients choose complementary and alternative medicine instead of conventional treatment. *J. Fam. Pract.* 2001; **50**: 1067–1074.
- Smith SS. Who uses complementary therapies? *Holist. Nurs. Pract.* 2004; **18**: 176.
- Sungsing K, Hatthakit U, Apichato A. Cancer patients' experiences in using meditation for self-healing. *Songkla Med. J.* 2007; **25**: 39–48.
- Tanphaichitr K. [*Buddhism Answers Life*] (4th edn). Bangkok: Hor Ratanachai, 2006 (in Thai).
- Thirasiri L. [*Self-treatment of Cancer based on Natural Therapy*] (14th edn). Bangkok: Ruamthat, 2005 (in Thai).
- Verhoff MJ, Hilsden RJ, O'Beirne M. Complementary therapies and cancer care: an overview. *Patient Educ. Couns.* 1999; **38**: 93–100.
- Wonghongkul T, Deachaprom N, Phumvichuvate L, Kertsang S. Quality of life and alternative therapy used in long-term breast cancer survivors. *Symposium conducted at the meeting of the Fifth Nursing Academic International Congress: Cultural Diversity in Alternative Health Care and Nursing Therapeutics*; 2–4 December, 2002; Khon Khean, Thailand: Khon Khean University, 2002.
- Works CR. Principles of treatment planning and clinical research. In: Yarbro CH, Froggare MH, Goodman M, Groenwald SL (eds). *Cancer Nursing Principles and Practice*. London: Jones and Bartlett, 2000; 994–1047.