

## RESEARCH ARTICLE

# Breast Cancer Survivors' Efforts to Renew and Preserve Their Health in Taiwan

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### Abstract

**Aims:** This study was designed to describe the personal life experiences of breast cancer survivors regarding their efforts to recover and preserve their health in Taiwan. **Method:** The study utilized a qualitative research method, wherein purposive sampling, one-on-one, face-to-face, in-depth semi-structured interviews were conducted. The data were then analyzed using content analysis. Data were saturated after interviewing 15 cancer survivors. **Results:** Three common themes emerged: introspection on the cause of the cancer, realization of a harmonized lifestyle, and reflecting on the strong will to survive. **Conclusions:** These findings are helpful in understanding the relationship between breast cancer survival and individual efforts to restore and preserve health.

**Keywords:** Breast cancer survivors - life experiences - health preservation - Taiwan

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### Introduction

Each year, approximately 1.38 million people are diagnosed with breast cancer worldwide (Jemal et al., 2011). The incidence of breast cancer increases annually worldwide. Breast cancer cases represent 23.48% of total cancer cases for women in Taiwan which is higher than the 22.9% worldwide (Taiwan Cancer Registry, 2008).

Taiwanese culture is influenced by numerous deep-rooted habits. It is also affected by the American diet, in the same time. In addition, the the Taiwanese people are currently encountering increasing levels of stress in their daily lives and practice unhealthy lifestyles. Cancer can be caused by various factors (National Cancer Institute, 2010). A number of breast cancer survivors believe that stress caused their cancer (National Cancer Institute, 2008). Furthermore, several risk factors for cancer can be avoided, and the probability of developing cancer can be reduced (Jemal et al., 2008). Learning the causes of and risk factors for cancer is the first step in cancer prevention. Estimates have suggested that about 50–75% of United States cancer deaths are caused by human behaviors such as smoking, unhealthy diet, obesity, and physical inactivity (National Cancer Institute, 2010). Obesity has been linked to many kinds of cancer and chronic diseases, and it is also related to cancer recurrence rates and poor prediction of cancer outcomes (Holmes et al., 2005; Holick et al., 2008; Irwin, 2008).

Numerous studies have indicated that, breast cancer survivors attempted to change their unhealthy behaviors

(Rabin and Pinto, 2006; Norman et al., 2007; Demark-Wahnefried et al., 2008). For example, they stopped smoking, made healthy food choices, and increased their levels of physical activity, which promoted good health and improved their quality of life (Norman et al., 2007; Demark-Wahnefried et al., 2008; Holick, et al., 2008; Magné et al., 2011; Weiner et al., 2010). Therefore, cancer patients took action to reduce stress or change their mood, which improved their lifestyle. Increased levels of healthy behavior and willingness to make lifestyle changes are advantages leading to breast cancer survival (Rabin and Pinto, 2006).

Every culture has its own health care paradigm. Major concepts that influence Chinese patients' perspectives on cancer include belief of Confucianism, Taoism and Buddhism (Chen, 2002). First, the teachings of Confucius are principles for social interaction and have a great influence on Chinese behaviour. Harmony with all others and a lack of self-centredness, respect for parents, and loyalty to family are the main teachings of Confucianism (Chen, 2002). Taoists believe that share a common belief being with nature provides them with peace of mind, deep breaths of fresh air promotes good health, and adjusting to change involves altering oneself to be in harmony with nature (Chen, 1996). Taoism developed theories of Traditional Chinese medicine (TCM), Feng shui, and Tai-Chi Qigong to prolong life. Good Feng shui creates an energy field that would facilitate health and wealth, whereas poor Feng shui may lead to illness and misfortune (Hsu et al., 2009). Tai-Chi Qigong is a form of energy

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medicine that can restore the exhausted body, promote relaxation, reduce stress, and enhance the immune system (Lee et al., 2007). Chinese beliefs and values also include herbal treatments and diet therapy (Chen, 2002). Approximately 35.6% of breast cancer patients used TCM outpatient services in Taiwan (Lin and Chiu, 2011). Buddhism has a strong influence on the beliefs and values of Chinese people. Chinese people believe in searching for happiness, peace, and a satisfying social life to promote health and prevent illness (Chen, 2002). Karma are Buddhist principles that encourage people to do good and to receive good in return (Chen, 2002). Fate and Karma are considered the underlying factors that determine a person's state of health and disease.

Although, previous research has suggested that cancer survivors believe that healthy behaviors can prevent cancer recurrence, these studies have focused mostly on the quality of life and the adjustments made after cancer (Bloom et al., 2004; Rabin and Pinto, 2006; Costanzo and Ryff, 2009). Another study indicated that social support had a positive impact on cancer patients (Helgeson and Cohen, 2000). Social support not only provided help for the patients but also allowed them to discuss their concerns about cancer issues (Helgeson and Cohen, 2000). Previous studies have discussed the life experiences and recovery efforts of cancer patients in Taiwan. A qualitative study that interviewed 14 newly diagnosed breast cancer patients reported that family support, seeking information about alternative information, practicing religion, attitude readjustment, and maintaining a normal lifestyle created a positive attitude for coping with cancer (Lu et al., 2010). A qualitative study of seven cancer patients found that the coping processes used by cancer sufferers enabled them to develop strategies and attitudes to assist them in living with cancer (Chen and Chang, 2012). Psychoneuroimmunology research has shown that stress modifies the delicate balance between health and disease (Tausk et al., 2008). Spiegel (2012) reported that providing emotional and social support, as well as improving stress management might have a positive impact on physiological stress-response systems that affect survival in terminally ill cancer patients. Hampton et al. (2007) indicated that greater spiritual support from religious groups and medical service providers was strongly linked to better quality of life for cancer patients.

Individual fulfillment is a key to living a healthy life and is important to breast cancer survivors because it can reduce the rate of cancer recurrence while increasing the chance of a positive prognosis. These studies focused mostly on quality of life and the adjustments made after cancer diagnosis. Previous studies have suggested that cancer survivors believe that healthy behavior can prevent cancer recurrence (Rabin and Pinto, 2006; Norman et al., 2007; Demark-Wahnefried et al., 2008). However, past qualitative research has focused on short-term survival experiences (Lu et al., 2010; Chen and Chang, 2012). Qualitative research with long-term breast cancer survivors has been limited to only a few studies. Thus, this study qualitatively examines the life experiences of breast cancer survivors who have survived for at least five years after diagnosis to better understand their efforts to

preserve their health.

## Materials and Methods

This qualitative research study attempted to describe the individual life experiences of breast cancer survivors regarding their efforts to restore and preserve their health. These life experiences stemmed from some kind of value system and were closely linked with social pulse. Therefore, this study used in-depth interviews to present multiple firsthand viewpoints of breast cancer survivors.

### Sampling

This study was conducted in the outpatient department of hospitals in northern Taiwan. We used purposive sampling, one-on-one, face-to-face, with the following conditions: (a) survival of at least 5 years after breast cancer diagnosis, (b) not having any complications, (c) ability to express life experiences in Mandarin or Taiwanese, and (d) allowing the interview to be recorded. Two patients declined to be involved. The number of samples was based on the data analysis; the standard was that with no new data appearing, the data were saturated. Data were saturated after interviewing 15 participants. Before beginning each interview, the researchers explained the intended purpose to the participants, and they signed consent form at the time of interview. The interview was recorded, and the participants were guaranteed that their privacy would be preserved. In addition, the participants were allowed to withdraw at any time. The research proposal was approved by the ethics committee of the Institutional Review Board (IRB) of the university and a hospital. Data were collected from January to July 2009.

### Procedure and analysis

Semi-structured interviews with open-ended questions were conducted. Two qualitative experts appraised the interviews' guide to ensure clarity and coherence. The following questions were included in the interview: (a) Would you please talk about your experiences with the disease and the impact of the disease on you and your family? (b) Would you please talk about your feelings of the recovery process and the impact of the recovery process on you and your family? (c) What kind of methods did you use to make your recovery once you were diagnosed, and why did you use these methods? (d) How did you feel about these methods, and what were their effects? (e) Is there anything else that you want to share with us?

Each interview took 60–90 minutes. The audio taped interviews were transcribed word for word, and the accuracy of the transcripts was checked against the taped interviews. Application content analysis successfully facilitated the identification of themes, subthemes, and concepts (Newell and Burnard, 2006).

Researchers should translate the theme and quote into English themselves. The meaning of language expression will also affect the translation (Temple and Young, 2004). The translation of the results from Chinese to English may have impacted the meanings expressed. Twinn (1997) reported that translation influences the validity

and reliability of qualitative data. This study employs two Chinese and English language experts. One expert translated the text from Chinese to English, while the other expert translated the text from English to Chinese, and the accuracy of their translations was verified. If their translation results differed, a third Chinese and English language expert was consulted to resolve the translation problem and ensure the English translation accurately communicates the meaning of the original Chinese study results.

The researchers ensured qualitative rigor of the study by establishing credibility, auditability, confirmability, and fittingness (Sandelowski, 1993). Credibility refers to the trustworthiness of the results. To achieve this, researchers reviewed all transcripts against the taped interviews to ensure correctness. Auditability refers to being able to follow the decision trail of the researchers for the data analysis. Authors and methods experts, all conversant in this methodology, reviewed the transcripts and agreed with the explanations of the main storylines that emerged from the content analysis. Fittingness refers to how well the study findings correspond to the data from which they were created as well as their similarity with the context of the phenomena under study.

This study was conducted by the researchers who managed the interviews. The interviewers recorded a full transcription of the entire interview process. The transcribed interviews were analyzed by the two authors of this article, both of whom were experienced in qualitative research methods and analysis. In addition, this study followed certain steps during the analysis to clearly show the research methodology, process, and procedures, including the time, date, distinct code, category, and the process of theory formation.

## Results

The average participant age was 52 years (the range was 31-77), and the average time since the initial diagnosis was 9 years (Table 1).

The major themes that arose are described below. The study revealed the efforts to restore and preserve health in the life experiences of breast cancer survivors, including introspection on the cause of cancer, realization of a harmonized lifestyle, and reflecting on the strong will to survive. Indeed, content analysis confirmed that these themes displayed a breakthrough pattern. This sequence of events can be clearly observed across a 5-year survival

**Table 1. Participant Characteristics (n = 15)**

| Variables                     | N | %    | Mean±SD   | Range |
|-------------------------------|---|------|-----------|-------|
| Age                           |   |      | 51.9±11.8 | 31-77 |
| Years since initial diagnosis |   |      | 9.0±4.2   | 5-17  |
| Education                     |   |      |           |       |
| University and above          | 8 | 53.3 |           |       |
| Senior high school            | 4 | 26.7 |           |       |
| Junior high school            | 3 | 20.0 |           |       |
| Cancer stage                  |   |      |           |       |
| I                             | 6 | 40.0 |           |       |
| II                            | 6 | 40.0 |           |       |
| III                           | 3 | 20.0 |           |       |

period in breast cancer patients.

### *Introspection on the cause of cancer*

Participants were asked to reflect on why they believed that had developed cancer. In their own words, the participants reflected on what had been wrong with their lifestyle and why they thought they had gotten breast cancer. Participants believe that constant reflection can provide an understanding of why they have cancer. Participants were influenced by the Taoist philosophy that suffering can allow transformation toward a healthier lifestyle. The introspection on the cause of cancer included two sub-themes: unhealthy lifestyle and the impact of environmental pollution.

**Unhealthy lifestyle.** Participant recalled the following about her past lifestyle. Most participants recalled being aware that they did not have a healthy balanced diet. They reported eating too much toxic food, such as foods high in fat and vegetables contaminated with pesticides. In addition, some confessed that before they were diagnosed, they did not adequately exercise, stayed up late, had unstable moods, lived a stressful life, and had some unhealthy habits. Participants thought that their poor lifestyle was responsible for their illness and that ill people have a tendency to become introspective on their behavior and habits.

"I think that I might eat too many foods that contain toxins, like vegetables contaminated with pesticides, high-fat foods, red meat, bread and biscuits, of which I eat a lot, and which causes my bowel movements to become abnormal." (Participant E)

"I had a lot of bad habits, including unstable mood and staying up late. I constantly felt remorseful and angry, and my situation kept getting worse. I have four children who create financial pressures for me, and the stress affects my personal physical condition." (Participant L)

"Because of the shifts that I worked, I slept poorly and my bowel movements were abnormal. I also had a bad temper and quarreled with others all the time. People were afraid of me!" (Participant H)

"I am a single mother raising children by myself, and I was worried about their behavior every day. I was under a lot of pressure." (Participant B)

"For my husband, there was only exclusion and dissatisfaction. I would like to thoroughly repent, break the past into pieces, and rebuild everything." (Participant K)

**Environmental problems.** Some participants suspected that their cancer was related to environmental problems or an ominous household environment. Chinese society also considers "a bad Feng shui home" as a possible cause of cancer. Some Chinese people are suspicious that a home's bad magnetic field can cause cancer.

"I lived in an urban environment where air pollution is very serious. I lived in that environment for a long time, so that's why I became sick." (Participant H)

"My fortune teller friend told me that my home was not good for me to live in because of the magnetic field around it; that's the reason I got diseases easily. It must have something to do with the bad Feng Shui!" (Participant I)

Realization of a harmonized lifestyle

Most of the participants who used complementary and alternative medicines improved their health and were more likely to recover from cancer. Realization of a harmonized lifestyle included seven sub-themes: food modification, Chinese herbal medicine, exercises, environment conversion, mood conversion, religious beliefs and support system.

Participants chose a light diet with a high intake of good foods such as fruits and vegetables, and adhered to a simplistic approach toward cooking, with an effort to preserve as much natural flavor as possible. Traditional Chinese physicians recommend taking Chinese medicines to adjust the body to allow the body and mind to heal. They exercise to relax the body. The living environment of breast cancer sufferers is also highly significant. Some participants moved to a physically and psychologically pleasant environment with clean air to allow their bodies to restore health. Religious beliefs also helped them achieve a psychological and spiritual balance.

Participants felt that God gave them hope and blessed them with peace. Support systems were crucial when they were sick. Support and encouragement from others allowed participants to face their illnesses with more confidence. Participants were also more compassionate toward others when their situation improved.

Food modification. Some participants consumed natural foods. They felt that a high intake in natural foods would make them physically and psychologically comfortable. Some participants reported that they made significant changes to their diet. Some participants reported feeling clear-minded and relaxed after drinking wheatgrass juice and eating more raw foods, including vegetables. Some participants cared for themselves in accordance with the theories of TCM to restore balance to the body. Chinese diet therapy reduced fatigue and gave sufferers more energy.

"I have not eaten deep-fried food since I was sick. I try to eat food that has been fired or steamed. I eat organic food, pay attention to food sources, and try to avoid foods with additives and preservatives." (Participant C)

"I feel good when I eat organic food, which is no burden to my body, and I feel at ease psychologically. In addition, I do not feel tired and I am more relaxed." (Participant A)

"I prepared healthy soup with red onion, red tomatoes, carrots, pumpkins, and cabbage. In addition, I made myself nutritious herb tea with astragalus membranaceus matrimony vine, Chinese red dates, and chrysanthemum." (Participant G)

"The diet was natural, pesticide-free fruits and vegetables, food crops, and nuts. I did not consume any toxic food or non seasonal food. In addition, I tried to consume only food and drink that were close to my body temperature." (Participant K)

Chinese herbal medicine. Some participants cared for themselves in accordance with the theories of TCM to restore balance to the body. Chinese diet therapy reduced fatigue and gave sufferers more energy.

"I tried detoxification in accordance with TCM, and I now have more energy. According to the theory of TCM, we should do our best to live a natural life without air

conditioning or fans. Our bodies automatically sweat in the heat, and after sweating, I felt comfortable physically and mentally." (Participant K)

"When my physical condition was not well, I would see a traditional Chinese physician, taking Chinese herbal medicine to restore balance, sometimes using Chinese diet therapy. Indeed, after conditioning of the Chinese herbal medicine, my physical strength improved." (Participant D)

Exercise. Exercises were divided into two types: physical and metaphysical. Qigong is a metaphysical exercise. Participants think exercise is a critical part of life that can make the body more comfortable, healthier, and less susceptible to illness. Qigong is a form of exercise that promotes relaxation and a healthy body that improves general wellbeing.

"I hiked about three times a week, took aerobics once or twice a week, and went swimming or played badminton on weekends. Sports are essential to my daily life, and exercising can make me sweat and increase my metabolism, detoxification, waste emission, weight control, and fat elimination." (Participant A)

"I was doing Qigong of strength. I did this training for two hours every day to enhance my vital capacity, and I felt very relaxed after the course." (Participant N)

Environment conversion. Some participants decided to move to an environment with clean air and greater magnetic fields after becoming sick. And some participants reported that magnetic fields from crystals enhanced her mood, where as another participants reported living in a temple to help her relax and to accelerate her recovery.

"I immediately moved back to the countryside after being sick. The air in the country was so natural, cool, and clean. Every morning when I woke up, I was able to breathe fresh air." (Participant H)

"The magnetic field of crystal really helped me a lot. I put some crystal in my room, and I felt more relaxed mentally and physically. Even during chemotherapy, I felt better when I wore Sugilite crystal." (Participant I)

"I asked for a nine-month leave after being sick, and I went to live in the temple. The nuns of the temple cared for me with compassion, and I will never forget their kindness. They made me feel relaxed, and they kept a smile on my face, which was definitely helpful to my recovery." (Participant K)

Mood conversion. Some participants thought that they should change their thinking process, reduce lifestyle pressures, and learn to cope with their role as cancer survivors. Participants allowed themselves to become more relaxed.

"After I suffered the sickness, I would jump away from my own role, not to whirl myself into it, not forcing myself to do something impossible. I tried not to worry too much because I cannot do everything. The best way is to leave it to God and don't make yourself heavy burdened. When you release everything, you have more flexibility and space." (Participant C)

"Adjusting my mood was very important, and I needed to change my attitude after being sick. I tried my best to express my anger and not suppress myself as I had done before." (Participant I)



Religious beliefs. Some participants looked toward religion to achieve peace of mind. Religious beliefs brought hope and faith for some participants. Some participants said that becoming ill was God's way of telling her that her body should be taken care of. Some participants who used religion to guide them to a more enlightened place reported becoming more confident in coping with cancer.

"The disease kept telling me that I must obey. God makes me reflect on myself through this kind of thing. I should take good care of my body instead of keeping busy all day. I should cherish the body that God gave me and keep my body in a good status spiritually and physically." (Participant A)

"Worship of Avalokiteshvara gave me spiritual sustenance. When I would see other patients, I felt like my condition was better because she was protecting me and blessing me." (Participant F)

"I'm grateful to the Amitabha Buddha who protected and blessed me in faith. The tapes of the preaching Buddha scriptures were a good remedy for my sickness. They were constantly warning and teaching me, enhancing my faith, and showing me the right way. They felt like a lamp in the dark" (Participant J)

Support system. Some participants mentioned that the care and companionship of others were crucial throughout the treatment process. Participants needed more encouragement and care from others when they were first diagnosed with cancer. Friends and family continued to visit and offer encouragement during the course of illness. Health care workers also offered information and helpful discussions. Participants were influenced by the Buddhist "Karma" principles that people should do good for others. Some participants thought that they should be thankful to others for their help and care throughout the treatment process. Some also believed that they should embrace an altruistic view, and they hoped to guide and assist other cancer patients through their experiences. Cancer patients need friends to encourage them when they are sick. Patients also need to encourage other patients.

"When I was sick, many church friends came to see me every day. They prayed with me, they consoled me, and they constantly supported me. The specialist nurse also made me feel very good, and we discussed how to face my disease." (Participant A)

"The doctor sent me books about following natural therapies to overcome cancer, and my husband carefully read each one of them. The Buddhists also came to the hospital to visit, and recite the Buddha's name in the early morning every day. They also brought me some soup and stayed with me until late at night." (Participant K)

"I would like to thank those people who lent me a helping hand during my battle with cancer. They helped me when I was in the most hopeless situation. Sometimes, I visited cancer patients with church friends and shared my experiences." (Participant A)

"I believe in the Buddhist "Karma" principles. So I shared what I had learned with many people. I told them that their mood affected their condition and their family. I also told them to live their life and not worry about death because that day must come to all of us." (Participant B)

### *Reflecting on the strong will to survive*

Treatment is a painful process that causes suffering among most cancer patients. Some participants believed that they needed to face the disease bravely, endure the pain, and rely on their own strength to persevere through the therapy process. Some participants were afraid that people knew they had breast cancer when they were first diagnosed.

Participants were determined to move forward and insisted on living strongly, despite facing cancer. They thought that their lifestyle needed to reflect a strong will to survive and address the changes in their lives. Participants who want to live must rely on the strength of their will because making the necessary lifestyle changes requires a strong determination. Participants spoke of a change in mood after their sickness. Participants acknowledged that preserving their health requires considerable changes. Many changed to survive.

"I was afraid to hear other people say I had this disease. I felt helplessness and panicked. During the chemotherapy, every day I felt fear, depression, stress, physical and mental sadness, a bitter heart. I told myself to be patient. I had no choice but to get over it." (Participant G)

"I packed a lot of crumpled gauze and climbed a mountain after I was discharged. Every day that I was climbing I told myself to live at that time. You should strive to live. Anyway that day must come to all of us, you should face it. Because I want to live, I must exercise." (Participant D)

"After I was sick, I become more open-minded and happy. I would say how fortunate I was after every year that I survived. I feel like I have hope, and I am not so serious anymore. I will do my best and never give up!" (Participant F)

"I've changed a lot to survive. No matter what diet, daily habits, or mentality were required, I had to change." (Participant I)

## **Discussion**

The results of this study show breast cancer survivors' experiences addressing the threat of cancer and their efforts to preserve their health. Most participants reported understanding the factors involved in their development of cancer and were aware of too much fat and meat in their diets. Additionally, they generally did not exercise enough. They slept too little, experienced emotional instability and stress, and indulged in bad habits. These results were consistent with those of many studies that have attempted to understand the causes of cancer and unhealthy lifestyle or the relationship between them (Stewart et al., 2001; Mokdad et al., 2004; Olshansky et al., 2005). Many Taiwanese people influenced by Taoism's belief and practice, believe that a peace of mind should be cultivated and a harmonious with nature life style be adjusted in order to maintain or restore health. Breast cancer patients want to seek their life and spiritual balance.

Some participants adopted a healthier lifestyle, such as a healthy diet, detoxification, actively exercising, enjoying the fun of life, seeking an environment with a good magnetic field, and helping their bodies to restore

their health. Similarly, other studies have pointed toward cancer survivors attempted to change their unhealthy behaviors (Norman et al., 2007; Demark-Wahnefried et al., 2008; Holick et al., 2008; Weiner et al., 2010; Magné et al., 2011). Chinese culture emphasizes health preservation. Good Feng shui is seen to create a good environment. Many survivors hoped that improving their Feng shui after they became sick would bring them good health and luck. These results are consistent with those from the literature which suggest that patients who improved the Feng shui in their living environment experienced having more energy (Hsu et al. 2009).

Participants were helped in their cancer survival efforts by choosing healthy foods, consuming a light diet with plenty of fruits and vegetables, and by simplifying their cooking. These results are consistent with those of many other studies (Norman et al., 2007; Demark-Wahnefried et al., 2008; Weiner et al., 2010; Magné et al., 2011). Many participants seek TCM treatment to better adjust their body and follow Chinese diet therapy to reduce discomfort. This result is consistent with the findings of certain studies reporting that Chinese people often use of TCM, and traditional preventive diet (Jiang, 2005). In Breast cancer survivors follows the practice of TCM to heal body, mind and soul. Many participants changed their impulsive personalities after being diagnosed with cancer. They limited their stress and attempted to facilitate their lives. These findings are consistent with previous studies that discuss the importance of modifying behavior to harmonize with nature (Chen, 1996; Tausk et al., 2008; Spiegel, 2012). Many participants began exercising in an effort to improve their health. This result is similar to others studies that have indicated that exercise can enhance health and prevent cancer recurrence (Norman et al., 2007; Holick et al., 2008; Weiner et al., 2010; Magné et al., 2011). The results of this study show that many participants practiced Qigong to restore balance to the body. It allowed them to be more relaxed and energetic, which was consistent with the findings of some studies (Lee et al., 2002; Lee et al., 2003; Lee et al., 2007). Breast cancer survivors through Qigong let the body recover more smoothly.

Spiritual enlightenment and religion were also effective means for cancer survivors to cope with their disease, which was consistent with the findings of the study (Hampton et al., 2007). Many cancer survivors in the present study prayed, which was consistent with previous research (Henderson et al., 2003). Furthermore, survivors require additional support and encouragement from family members, friends, medical personnel, and other survivors when they are diagnosed with cancer. This period usually involves feelings of helplessness and panic for the patient. These results were consistent with many studies that suggested breast cancer survivors require emotional support (Helgeson and Cohen, 2000; Lu et al., 2010; Chen and Chang, 2012; Spiegel, 2012). Participants felt that they needed religion to lift their spirits, and they believe in the Buddhist "Karma" principles that people should do good for others. Knowing that someone cared for them was crucial to participants, and the support helped them cope with cancer. These survivors wanted

to express their gratitude in other ways. Our results are similar to other studies, which indicated that social support has positive benefits for cancer survivors, such as making survivors discuss their anxieties of the cancer, obtaining treatment advice on the disease, and helping them psychologically adapt to the disease (Helgeson and Cohen, 2000; Lu et al., 2010). Our participants hoped to share their cancer survival stories with other cancer survivors who needed help.

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## References

- Bloom JR, Stewart SL, Chang S, et al (2004). Then and now: quality of life of young breast cancer survivors. *Psychooncology*, **13**, 147-60.
- Brown ZK, Boatman K (2009). 100 Questions & answers about breast cancer. 3rd ed. Boston, MA: Jones and Bartlett Publishers.
- Chen PY, Chang HC (2012). The coping process of patients with cancer. *Eur J Oncol Nurs*, **16**, 10-6.
- Chen YC (2002). Chinese value, health and nursing. *J Adv Nurs* **36**, 270-3.
- Chen YL (1996). Conformity with nature: a theory of Chinese American elders' health promotion and illness prevention processes. *Adv Nurs Sci*, **19**, 17-26.
- Costanzo ES, Ryff CD (2009). Psychosocial adjustment among cancer survivors: findings from a national survey of health and well-being. *Health Psychol*, **28**, 147-56.
- Demark-Wahnefried W, Rock CL, Patrick K, et al (2008). Lifestyle interventions to reduce cancer risk and improve outcomes. *Am Fam Physic*, **77**, 1573-8.
- Hampton DM, Hollis DE, Lloyd DA, et al (2007). Spiritual needs of persons with advanced cancer. *Am J Hosp Palliat Care*, **24**, 42-8.
- Helgeson VS, Cohen S (2000). Group support interventions for women with breast cancer: who benefits from what? *Health Psychol*, **19**, 107-14.
- Henderson PD, Gore SV, Davis BL, et al (2003). African American women coping with breast cancer: a qualitative analysis. *Oncol Nurs Forum*, **30**, 641-7.
- Holick CN, Newcomb PA, Trentham-Dietz A, et al (2008). Physical activity and survival after diagnosis of invasive breast cancer. *Ca Epid Biom Prev*, **17**, 379-86.
- Holmes MD, Chen WY, Feskanich D, et al (2005). Physical activity and survival after breast cancer diagnosis. *J Am Med Associ*, **293**, 2479-86.
- Hsu CY, O'Connor M, Lee S (2009). Understandings of death and dying for people of Chinese origin. *Death Stud*, **33**, 153-74.
- Irwin ML, Smith A, McTiernan A, et al (2008). Influence of pre- and post-diagnosis physical activity on mortality in breast cancer survivors: The Health Eating Activity and Lifestyle (HEAL) Study. *J Clin Oncol*, **2026**, 3958-64.
- Jemal A, Bray F, Center MM et al (2011). Global cancer statistics. *CA: A Cancer J Clinical*, **61**, 69-90.
- Jemal A, Siegel R, Ward E, et al (2008). CA: a cancer Journal for Clinicians. *Cancer Stat*, **58**, 71-96.
- Jiang WY (2005). Therapeutic wisdom in traditional Chinese medicine: a perspective from modern science. *TRENDS*

*Pharm Sci*, **26**, 558-63.

- Lee MS, Chen KW, Sancier KM, et al (2007). Qigong for cancer treatment: asystematic review of controlled clinical trials. *Acta Oncol*, **46**, 717-22.
- Lin YH, Chiu JH (2011). Use of Chinese medicine by women with breast cancer: a nationwide cross-sectional study in Taiwan. *Comple Therap Med*, **19**, 137-43.
- Lu MH, Lin HR and Lee MD (2010). The experiences among older Taiwanese women facing a new diagnosis of breast cancer. *Cancer Nurs*, **33**, 398-405.
- Magné N, Melis A, Chargari C, et al (2011). Recommendations for a lifestyle which could prevent breast cancer and its relapse: Physical activity and dietetic aspects. *Critical Rev Oncol / Hemat*, **80**, 450-9.
- Mokdad AH, Marks JS, Stroup DF, et al (2004). Actual causes of death in the United States, 2000. *J Am Med Associ*, **291**, 1238-45.
- National Cancer Institute (2008). Psychological Stress and Cancer: Questions and Answers-2008 Update, National Cancer Institute. [accessed on March 30, 2012]. Available at: <http://www.cancer.gov/cancertopics/factsheet/Risk/stress>.
- National Cancer Institute (2010). Cancer trends progress report-2009/2010 Update, National Cancer Institute. [accessed on March 30, 2012]. Available at: <http://progressreport.cancer.gov>.
- Newell R, Burnard P (2006). Research for Evidence-Based Practice, Blackwell Publishing, Oxford.
- Norman R, Bradshaw D, Schneider M, et al (2007). A comparative risk assessment for South Africa in 2000: towards promoting health and preventing disease. *S Afr Med J*, **97**, 637-41.
- Olshansky SJ, Passaro D, Hershow R, et al (2005). A potential decline in life expectancy in the United States in the 21st Century. *N Eng J Med*, **352**, 1103-10.
- Rabin C, Pinto B (2006). Cancer-related beliefs and health behavior change among breast cancer survivors and their first-degree relatives. *Psychooncology*, **15**, 701-12.
- Sandelowski M (1993). Rigor or rigor mortis: the problem of rigor in qualitative research revisited. *Adv Nurs Sci* **16**, 1-8.
- Spiegel D (2012). Mind matters in cancer survival. *Psycho-Oncol* doi: 10.1002/pon.3067.
- Stewart D, Cheung A, Duff S, et al (2001). Attributions of cause and recurrence in long-term breast cancer survivors. *Psychooncology*, **10**, 179-83.
- Taiwan Cancer Registry (2008). Cancer survival rates in Taiwan, 2008. [accessed on March 30, 2012]. Available at: [http://cph.ntu.edu.tw/uploadimages/Sur\\_Breast.pdf](http://cph.ntu.edu.tw/uploadimages/Sur_Breast.pdf)
- Tausk F, Elenkov I and Moynihan J (2008). Psychoneuroimmunology. *Derma Therapy*, **21**, 22-31.
- Temple B, Young A (2004). Qualitative research and translation dilemmas. *Qual Res*, **4**, 161-78.
- Twinn S (1997). An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *J Adv Nurs*, **26**, 418-23.
- Weiner JG, Jordan TR, Thompson AJ, et al (2010). Analysis of the relationship between diet and exercise beliefs and actual behaviors among breast cancer survivors in Northwest Ohio. *Breast Cancer*, **4**, 5-13.