

Journal of Complementary and Integrative Medicine

Volume 3, Issue 1

2006

Article 2

Use of Complementary and Alternative Medicine by Chinese Individuals Living with Cancer in British Columbia

Lyren Chiu*

Lynda Balneaves[†]

Maria C. Barroetavena[‡]

Richard Doll**

Anne Leis^{††}

*University of British Columbia, lyren.chiu@gmail.com

[†]University of British Columbia, balneaves@nursing.ubc.ca

[‡]BC Cancer Agency; University of British Columbia, mbarroet@bccancer.bc.ca

**BC Cancer Agency, rdoll@bccancer.bc.ca

^{††}University of Saskatchewan, anne.leis@usask.ca

Use of Complementary and Alternative Medicine by Chinese Individuals Living with Cancer in British Columbia*

Lyren Chiu, Lynda Balneaves, Maria C. Barroetavena, Richard Doll, and Anne Leis

Abstract

Complementary and alternative medicine (CAM) is widely used around the world for cancer. Preliminary research indicates that cultural factors influence cancer patients' decisions to use, with significant associations seen between ethnicity and prevalence and type of CAM use. To enhance a culturally-appropriate understanding of CAM use in Chinese cancer patients in BC, this study explored a sample of Chinese cancer patients to gain: (1) the general conceptualization of CAM use; (2) the meaning of CAM use in relation to cancer; (3) the patterns of CAM use prior to and after cancer diagnosis; (4) the reasons for CAM use; and (5) the socio-cultural process in making decision about CAM use. A naturalistic, descriptive study design was used that incorporated semi-structural ethnographic interviewing and qualitative data analysis. The results of this study provide insights about the pattern, reasons, meaning, as well as cultural and socioeconomic factors underpinning the use of CAM. The CAM decision-making (DM) process was found to be non-linear and comprised of four distinct phases: fitting with the cultural belief framework/lifestyle, seeking information and clarification, evaluating the effectiveness of CAM use, and balancing the cost and benefits of CAM use.

KEYWORDS: complementary and alternative medicine use, traditional chinese medicine, cancer, chinese, British Columbia

*This study was funded by the National Cancer Institute of Canada (NCIC) through its research with the Centre for Behavioral Research and Program Evaluation (CBRPE). The authors are grateful for the support from Cancer and Complementary and Alternative Medicine Team. The authors would also like to thank Irene Chan and Yuan Lai for assistance with data collection. Correspondence should be addressed to Dr. Lyren Chiu at the School of Nursing, University of British Columbia, British Columbia, Canada. Phone: (604) 822-7456; Fax: (604) 822-7466; E-mail: chiu@nursing.ubc.ca

INTRODUCTION

Complementary and alternative medicine (CAM) is widely used around the world for cancer (Ernst & Cassileth, 1998). Estimates of CAM use among patients with cancer range from 7 to 64%, depending on the type of patient and survey method (Ernst & Cassileth). In a study aimed at estimating the prevalence of CAM use by cancer patients in six Canadian provinces, 43% of the approximately 2,064 patients interviewed reported using CAM as part of their cancer care (Leis, Verhoef, & Doll, 2003). A recent survey of a random sample of 334 women living with breast cancer in British Columbia (BC) further revealed that nearly 80% of the women were using at least one type of CAM following their cancer diagnosis (Balneaves, 2002).

Among cancer patients and the general population, little quantitative work has been done to examine the use of CAM in diverse cultural groups in Canada (Statistics Canada (NPHS), 1996; Balneaves, 2002; Boon et al., 1999). The research has been limited in several ways. Foremost, ethnicity has not been a focus in studies of this type, and the vast majority of informants identify themselves as being of either North American or European descent. Second, the absence of culturally appropriate and sensitive conceptualization of CAM and the specific exclusion of traditional healing practices in surveys of CAM use may have underestimated CAM use in diverse ethnocultural groups. Lastly, the validity of the survey methods may have been compromised by language restrictions, with the majority of surveys being distributed in English only. This limitation would reduce the cultural diversity of the sampled populations and prevent accurate comparisons of CAM use among ethnocultural groups living in Canada.

According to the 2001 Census, BC ranks first among the provinces with the highest proportion of visible minorities (22% of its total population). Chinese represents the largest ethnic group in BC (9.4% of the provincial population), followed by South Asians (5.4%). Within BC, the cities with the highest proportion of Chinese populations are Richmond (39%), Vancouver (30%) and Burnaby (26%). Consistently, Mandarin and Cantonese are reported as the mother tongues of 35% and 26% of residents from Richmond and Vancouver, respectively. Given the predominance of the Chinese communities in BC, the health needs of this ethnocultural group must be understood. Current data regarding incidence of cancer among the Chinese population in BC is limited because the provincial cancer registry does not have complete information regarding ethnicity. At the same time, the incidence of cancer has become a major concern within the Chinese communities (Hislop et al., 2003). Clinical observations by members of our research team further indicate that an increasing proportion of individuals of Chinese ethnicity in BC is being diagnosed with cancer. This observation has been confirmed in a sample of 700 consecutive,

newly diagnosed cases admitted to the Vancouver Cancer Centre of the BC Cancer Agency in 2001. The analysis of these cases revealed that 14% of patients referred for cancer treatments identified Mandarin or Cantonese as their mother tongue. These observations further support the need to explore CAM use by Chinese individuals who are living with cancer in BC.

Preliminary research indicates that cultural factors influence cancer patients' decisions related to CAM use, with significant associations occurring between ethnicity and prevalence and type of CAM use (Alferi et al., 2001; Hilton et al., 2001; Maskarinec et al., 2000; Lee et al., 2000). Chiu's research within the immigrant Chinese communities has identified CAM use as a spiritual resource perceived to be an essential component of care for Chinese women living with breast cancer (Chiu, 2001).

To date, three known studies have examined the influence of ethnicity on CAM use by cancer patients. In the first study, data from telephone interviews with 379 women with breast cancer living in California was used to understand the prevalence of CAM use in four ethnic groups (Latino, White, Black [sic], and Chinese) and factors influencing their treatment choice (Lee et al., 2000). The findings indicated that ethnicity was an important factor in CAM use. The type of therapies used varied by ethnic group, with Blacks being most likely to use spiritual healing, Chinese being most likely to use herbal remedies, and Latinos and Whites most likely to use dietary therapies. Overall, 48% of the informants used at least one type of CAM. The researchers urged that further research be done to examine detailed patterns of use and access, and suggested that the study should be replicated in other communities to address heterogeneity in acculturation and differences based on countries of origin.

The second study, involving a mail survey with 1,168 cancer patients in Hawaii, found that CAM was used differently, based on ethnic differences (Maskarinec et al., 2000). After being diagnosed, a quarter of the informants indicated that they had used at least one type of CAM, with prevalence rates ranging across ethnic groups from 18% (Japanese) to 39% (Filipino). Ethnic differences were also noticeable for the number of CAM utilized, with Caucasians reporting the highest number of therapies and Filipinos having the lowest number of therapies.

The prevalence of CAM use by cancer patients, actively undergoing conventional treatment in Taiwan, was also examined (Liu et al., 1997). The findings showed that 64% of the sample used indigenous Chinese medicine at some point after their cancer diagnosis, with two-thirds using such treatments concurrently with conventional chemotherapy. None of the informants were able to give a scientific explanation as to why they used CAM, and only 10% of the cancer patients obtained a prescription from a qualified traditional Chinese

medicine (TCM) practitioner. The majority (90%) of the CAM was based on advice from friends, family, and other patients, as well as media reports.

Chiu also found that most Chinese immigrant mothers practiced traditional healing on a daily basis, though the individuals who were acculturated to the dominant Canadian society tended to adopt conventional health practices (Chiu, 2005). In a study examining CAM use within the context of mental illness, Chiu identified specific reasons and decision-making processes related to CAM use in Chinese women and found that they do not conceptualize CAM in the same way as do Westerners (Chiu, 2005). Balneaves examined the prevalence, patterns of use, and predicting factors of CAM use in women living with breast cancer, highlighting the substantial presence of CAM use in the breast cancer community and the contextualizing of CAM within preventive, ameliorative, and restorative health beliefs (Balneaves, 2002). Leis and her associates, in the first comprehensive Canadian prevalence survey (Leis, Verhoef, & Doll, 2003), found BC to have the highest rate of CAM use in Canada.

The growing ethnocultural diversity in Canada challenges oncology health professionals to develop culturally sensitive care strategies. Describing and understanding health service utilization issues from an ethnocultural perspective is difficult, however, because of the diversity in beliefs and customs, immigration histories, degree of acculturation, places of origin, and religious backgrounds in ethnocultural communities. To enhance a culturally appropriate understanding of CAM use in Chinese cancer patients in BC, both Chinese immigrants and second-generation Chinese were included in the study.

Experts in the field of ethno-medicine and transcultural nursing advocate paying attention to the health beliefs of ethnocultural groups to improve care and health outcomes for ethnocultural patients (Berger, 1998; Chen, 1999; Clark, 1995; Spector, 1995; Wing, 1998). "Empowering ethnocultural communities through informal care may be the most culturally appropriate approach for improving the health status of ethnocultural populations. Informal care, defined as alternative health care, is pervasively used by ethnocultural groups and its potential in improving the health of ethnocultural groups has been underestimated and under-utilized" (Chen, 1999). As an estimate, 75% of abnormal symptoms may be treated outside of the professional health care sector (Furnham & Forey, 1994). Individuals who use CAM are either 'pushed' into doing so because of their dissatisfaction with conventional medicine, or are 'pulled' into doing so because of their wider belief systems (Furnham & Forey, 1994; Kelner & Wellman, 1997).

This study explored a sample of Chinese cancer patients to understand: (1) the general conceptualization of CAM use; (2) the meaning of CAM use in relation to cancer; (3) the patterns of CAM use prior and after cancer diagnosis;

(4) the reasons for CAM use; and (5) the socio-cultural process in making decision about CAM use.

METHODS

This naturalistic, descriptive study incorporated semi-structural ethnographic interviewing and qualitative data analysis. Ethical approval was obtained from institutional ethical review boards. Eligible informants included individuals who identified themselves as Chinese, were 18 years and older, and had been diagnosed with cancer. Given the possible influence of the following variables on CAM use (Ray-Mazumder, 2001), purposively sampling ensured diversity in gender, age (i.e., 50 years and below and more than 50 years), places of origin (i.e., Mainland China, Hong Kong, Taiwan), and generation (i.e., first- and second-generation Chinese). The term Chinese is defined in this study as first-generation (i.e., Chinese immigrants) and second-generation of Chinese ethnic origin (i.e., children of Chinese immigrants). Eligible informants were recruited through both clinical and community cancer organizations.

Ethnographic Interviewing

The open-ended ethnographic interviews began with an invitation for informants to talk about their experiences with illness and management of illness, their experience with CAM use in relation to cancer, including factors affecting their CAM use, difficulties they encountered in using CAM, and their attitudes toward use of both conventional cancer treatment and CAM. The interviews lasted between 90 minutes and 2 hours and took place at a mutually agreeable location. As each informant disclosed specific ideas and feelings, the interviewer used probe questions to seek greater depth of meaning. After the interviews, the interviewer recorded fieldnotes to document rituals, environmental circumstances, informant characteristics, nonverbal behaviors, affect, the discussion process, overall impressions, and any difficulties with the interview. Interviews and fieldnotes were transcribed verbatim.

Data Analysis and Interpretation

The data analysis of transcribed and translated interviews was guided by constant comparative analysis method and coding strategies. Using this approach, a responsive interaction takes place between the collection and analysis of data. As data collection and analysis progresses, questions and probes became more specific to address early theoretical conceptualizations and to validate suggested themes and relationships in the data.

In this study, the text unit was used (i.e., line of text or paragraph). One or more codes can be attached to each text unit and the codes, which are derived

from a list, can be added to, and developed as the analysis proceeds. One way of defining the codes is to focus on the context of what the informants say, or on the topics discussed, which can then be developed into theoretical concepts or categories. Fieldnotes were also reviewed for inconsistencies in the data. All ideas expressed were included, with each interview, observation, and impression being used to create categories. Subsequent interviews were analyzed so as to build on these categories or create new ones. During data collection and analysis, the multidisciplinary research team met at regular intervals to discuss the emerging categories, cultural themes, and interpretations. Five informants, who were found to be excellent informers, were asked to participate in another interview to permit a member check of the preliminary analysis. Member check is commonly used in qualitative research to confirm the accuracy and completeness of the findings.

FINDINGS

Demographics

The study was conducted in an urban centre in BC. A total of 14 Chinese cancer patients (8 females and 6 males) with a mean age of 49.6 years were included in this study. Cancer diagnoses from stage I to III were represented in the sample. All but one informant were first-generation Chinese who had immigrated to Canada when they were between 4-34 years of age, with a mean time since immigration of 12.3 years. Table 1 provides additional demographic data.

Definitions of CAM

The language used by informants in the study to refer to CAM was “alternative therapy.” The informants in this study conceptualized CAM as non-Western medicine or health care that was not covered by provincial health insurance. The understanding of CAM varied. Some informants had heard of the term but had no knowledge about what types of therapies it encompassed. Others could identify a wide range of CAM products or practices without giving further explanations. With regards to Traditional Chinese Medicine (TCM), some individuals included this traditional form of healing as a type of CAM. Informants who identified TCM as being an integral part of their daily lives, however, appeared hesitant about including TCM under the general rubric of CAM.

Table 1. Demographics (N = 14)

Characteristics	Frequency	Characteristics	Frequency	
Age	<= 50	Nasopharyngol ogy Cancer	7.1% (1)	
	> 50		Unspecified	7.1% (1)
Gender	Male	Education	Elementary	7.1% (1)
	Female		Junior High	7.1% (1)
Place of Origin	China	High School	28.6% (4)	
	Hong Kong	Post Secondary	50.0% (7)	
	Taiwan	Master Degree	7.1% (1)	
	Vancouver	Religion	Buddhism	42.9% (6)
Mother Tongue	Cantonese		Christian	37.5% (5)
	Mandarin		No	21.4% (3)
Immigration History	English	Job Status	Full Time	28.6% (4)
	<= 10		Part Time	7.1% (1)
Diagnosis	> 10	Marital Status	Unemployed	64.3% (9)
	N/A		Married	64.3% (9)
	Breast Cancer		Single	14.3% (2)
	Liver Cancer	Separate	7.1% (1)	
	Colon Cancer	Divorce	7.1% (1)	
	ALL*	Widow	7.1% (1)	

*ALL means acute lymphoblastic leukemia

Patterns of CAM Use

All Chinese patients in this study concurrently used both TCM and other CAM therapies and Western medicine following their cancer diagnosis (Table 2). For many of the informants, self-medication of home remedies was an important part of their health care prior to having cancer and the practice was continued during the treatment and survivorship phases of their cancer journey. No differences in CAM use were found between first- and second-generation Chinese.

Table 2. Types of CAM Use (N = 14)

Type of CAM Use	Frequency
TCM Practitioner	28.6% (4)
TCM	100.0% (14)
Herbs (Lin Zhi, Yun Zhi)	78.6% (11)
Medicine diet or food therapy	35.7% (5)
Qi-gong, Tai chi	50.0% (7)
Acupuncture	21.4% (3)
Chinese massage therapy	14.3% (2)
Bar guan/Blood releasing	7.1% (1)
Spirituality/Religion	28.6% (4)
Meditation	28.6% (4)
Naturopathy (flaxseed oil, bitter almond)	21.4% (3)
Vitamin	14.3% (2)
Western herbs	14.3% (2)
Food practice in general	64.3% (9)

Reasons for Using CAM by Chinese Individuals Living with Cancer

Several important reasons for using CAM were uncovered in the interviews with Chinese cancer patients. With many individuals using CAM that was grounded in TCM, the connection to traditional Chinese beliefs about the body and illness was not surprising. Informants were also influenced in their CAM decision-making process by their experiences within both Western and Chinese health care systems, and the encouragement they received from significant others in their social networks.

Regulate and Strengthen the Body and Care for Mind and Spirit

Across cancer diagnoses, many Chinese patients spoke of using a variety of TCM and herbal therapies to “regulate” and “strengthen” their body functioning. For some individuals, the concept of regulating their body involved

building their immune system, increasing their energy level, balancing their body, mind, and spirit, and stabilizing and clearing the “internal heat” of their body, following conventional cancer treatment. This latter belief comes from the traditional Chinese belief that cancer and the associated chemotherapy drugs and radiation treatments are “hot” toxins that need to be eliminated from the body. Other Chinese cancer patients shared the concept of remedying “like with like” and suggested that TCM diet was necessary to replace the “*qi*” or energy in a particular organ that was lost as a consequence of cancer surgery. Yet another belief that was disclosed was that “because we are Chinese, our bodies are different” and, as a consequence, Chinese cancer patients must pay careful attention to their diet and therapies that are used. While conventional treatments were seen by all informants as being an important part of their recovery from cancer, many Chinese cancer patients believed that some form of CAM was necessary to promote long-term healing. As one 28-year old woman with acute lymphoblastic leukemia (ALL) shared, “I just wanted to basically build my immune system and make my body strong and healthy and a lot of the English medicines cannot do that; they can cure...but they cannot continue to make me better.”

Failure of Conventional Medicine

For many Chinese patients, the decision to use CAM was motivated by the “shortfall” of conventional medicine in relation to symptom management. Informants shared stories about intolerable fatigue, disruptive menopausal symptoms, pain, and anxiety that their physicians were unable to adequately treat. In frustration and desperation, some informants turned towards TCM doctors and herbal remedies in the hopes of relief. As a 56-year old woman with breast cancer described:

I always felt fatigue or in a kind of unfocused situation. No matter how careful I was, there’s always something wrong. I really didn’t know why. Under this circumstance, I just wanted to try alternative therapy as I’ve talked to many friends and doctor about this. And I said to the doctor, ‘I’ve tried everything. I joined the activities of the BC Cancer [Agency], but these couldn’t improve the situation. I had no choice but to try and get help from the TCM doctors.’

Cure Cancer

Although not a frequently mentioned reason for using CAM, a small number of informants reported using some type of CAM to cure their cancer. For one middle-aged man living with colon cancer, the use of TCM was motivated by the belief that conventional medicine alone would be unsuccessful: “We all know

that only Western medicine won't cure cancer. So we have to search for other alternative modalities." For one 49-year old woman with advanced breast cancer, the failure of conventional cancer medicine to control her disease and the limited optimism held by conventional physicians left her and her husband "very panicked and hopeless." When a friend referred her to a TCM doctor, she mentioned that "as my survival chance was so low and I felt I would die, it's no harm to give a try."

Other individuals reported believing that Western medicine had only a "temporary healing function" and that the "virus" that was causing the illness would remain, unless TCM was used to "clear the bad stuff". This belief was elegantly illustrated in the following quote from a young woman with breast cancer:

In China, people say that Western medicine treats symptoms and Chinese medicine treats the cause. Western medicine could right away get the condition under control; and then Chinese medicine could eliminate the cause. I also believe in this approach. This is an integrated approach.

The skepticism shared by some informants about conventional cancer treatment, however, was contradicted by individuals who perceived CAM as being "*xiang fu xiang cheng*", or supplementary, to conventional cancer care and cautioned against "forgetting" about conventional treatment.

Previous Experience with CAM

As all study informants, except for one individual, had immigrated to Canada from China, Hong Kong, and Taiwan, it was not surprising that many cancer patients felt extremely comfortable using TCM and had used different forms of TCM prior to their cancer diagnosis. Many informants reported frequently using TCM when they lived in China to treat minor illnesses and some individuals even reported traveling back to China when they initially suspected having cancer, to be diagnosed. One woman stated, "I'd go to the TCM doctor more often than going to a Western medical doctor". This familiarity that patients felt in relation to TCM may have motivated many individuals to seek care from TCM doctors.

Encouragement by Others

The social context underlying the decisions to use CAM was readily apparent in the stories shared by the informants. Many individuals reported receiving advice and information from other Chinese cancer patients about which TCM doctors, herbal therapies, and other CAM practitioners they had found helpful during their cancer journey. Stories of family members in China who had

used TCM during their cancer treatment and were still alive and without recurrence were especially persuasive. For example, a 50-year old man with nasal cancer said: “Wu Rong Pian was recommended by a relative in Hong Kong who had finished his chemotherapy. He keeps taking this type of capsule...And it didn’t recur. So when I heard about this medicine, I gave it a try.” Informants also reported being encouraged to use CAM by friends and acquaintances. One young woman who experienced repeated surgeries following her breast cancer diagnosis received substantial encouragement from a friend to try a range of natural supplements, mechanical devices, and practitioners. According to her, they thought, “...it would be better to have a combination of Western and Chinese medicine.” Other informants described receiving more indirect encouragement to use CAM, through advertisements for traditional medicines and TCM practitioners in local Chinese newspapers, magazines, and radio.

Although not all informants were confident in the CAM recommendations received from others, some individuals reporting feeling pressured to use some therapies: “I didn’t believe it in the beginning, but some of the survivors said to me that they had taken those and they worked, so I gave it a try anyway as cancer patients are quite weak in mind and not too determined as before.”

The CAM Decision-Making (DM) Process

The CAM decision-making (DM) process described by Chinese cancer patients was non-linear and marked by four distinct phases: fitting with the cultural belief framework/lifestyle, seeking information and clarification, evaluating the effectiveness of the CAM use, and balancing the cost and benefit. They may accept family member’s suggestions for using CAM without seeking clarification but will determine the benefit by examining the outcomes. The majority of the informants decided on their own about the use of CAM. Only a few sought advice from a Western doctor or their significant others.

Fitting with the Cultural Belief Framework/Lifestyle

The Chinese cancer patients often chose CAM that was fitting with their cultural belief framework and lifestyle. TCM is a popular medicine in China and Hong Kong. Chinese people accept it readily. A few informants mentioned that “Chinese are about the same [view toward Chinese medicine]” The Chinese patients believed that “Western medicine is much faster to take effects but often has many side effects. TCM however takes months to feel the effects.” “[Western medicine] just stops the symptom, which means its function is temporary ... TCM can help clear all bad stuff from inside the body.” Therefore, very few informants believed TCM would do any harm to them.

TCM is also a way of life and an integral part of Chinese culture. A few informants noted that Chinese practice TCM on a daily basis. For example,

Chinese would prepare herbal teas to clear inside heat after work and herbal soups to regulate body or enhance *chi*. Some informants practice morning *qi-gong* to harmonize and strengthen body, mind, and spirit. A 65-year old male informant described how “TCM helps you live” from his experience with the practice of everyday *qi-gong*.

With a large Chinese population in the BC region, TCM stores and services are accessible in this province. One informant stated, “Even common people can buy the *xia ku cao*.” A few informants also commented about the convenience in looking for a TCM doctor.

Seeking Information and Clarification

The information- and clarification-seeking phase of the DM process involves consultations with individuals in the Chinese community and in one's social networks. A few informants learnt about TCM through local newspapers, magazines, or the radio. Very few informants received information or engaged in meaningful discussions about their CAM decisions with a conventional health care provider. Generally, these discussions were described as being highly directive (i.e., "should or should not use CAM") but were not informative. One 44-year old woman stated, “I had been asking for information about TCM doctors through conventional sources, such as my family doctor, the surgeon, and Cancer Hotline. But no one could make a referral. All they could give was information. Then I turned to my friends, but none of them knew who's good with cancer treatment.” Nevertheless, some informants received helpful advice from their conventional cancer care provider. A 48-year old female mentioned the following consultation:

I saw a pharmacist at the Cancer Agency for medication. A nurse told her [the pharmacist] that I was on Tamoxifen. I asked the pharmacist if any TCM shouldn't be taken with Tamoxifen. She took my TCM prescription and called me back by saying that all items were fine except the *Ligustrum Japonium* for causing potential unusual bleeding.

The Chinese informants often found it difficult to locate credible and trustworthy TCM practitioners in BC. They often described feeling uncertain about which TCM doctors could be trusted for providing care to cancer patients and which had proper credentials to practice in Canada. Only a few informants were aware of recent TCM legislation that requires professionals to be licensed to practice TCM in BC.

Many Chinese patients seek information from their social network, which includes family members in Canada or overseas, as well as friends and acquaintances in the Chinese communities. Informants often mentioned, “My

friends and relatives in China who knew I had a cancer suggested me this and that.” The Chinese informants were greatly influenced by anecdotes that referred to other cancer patients who had used CAM and experienced successful results (i.e., remission).

Several informants mentioned that support groups were particularly helpful resources in their CAM DM process. Support groups provided the Chinese informants with a chance to share information about CAM and their journey with cancer. According to a female informant with colon cancer: “I met lots of Chinese patients with cancer in the clinic where we talked about TCM: what pills to take, which *Qigong* to practice, and where to receive acupuncture service”

Evaluating the Effectiveness of CAM Use

The informants evaluated their CAM use in a variety of ways, depending on the type of CAM. Many Chinese patients evaluated CAM use in terms of the concepts of yin/yang or hot/cold. A 44-year old woman with breast cancer said, “During chemo treatment, I added peanut skins and brown sugars to the soup. In this way, the food became very “hot” [according to Chinese medicine]. Two days later, my nose bled. I tried twice and would not dare to try that again.” The Chinese woman considered the adverse effect as an example of the imbalance of hot and cold within her body.

Some informants evaluated their CAM use in terms of the support they received from their family about their use of CAM and the attitude of family members. A 56-year old woman said, “My daughter is a dietician. When I saw a TCM doctor, she complained, ‘What the hell mama’s doing to trust these...’ Later she said, ‘If you want to do it, go ahead.’ She just kept watching and eventually found me improved. She never said I was right but she grew from complaining to be silent.”

Others evaluated their CAM use through observation and self-reflection. A 65-year old male with liver cancer evaluated his *Qi-gong* practice through prayer and meditation. This informant also “recorded every medicine” and “its response afterwards” as a way to evaluate his CAM use.

Informants also considered the degree of “therapeutic match” when evaluating the quality of the relationship they had with their TCM doctors. Some Chinese patients had appointments with several doctors before they found a provider with whom they felt comfortable “carrying on the relationship” and had confidence that they would “make the treatment work”. A TCM practitioner’s reputation, license, age, clinical experience, successful cases, publications, and compassion were used as predictors of the match. For a 49-year old female woman, “match” meant that the doctor had “clinical experience” and could “treat specific illness,” with “whole heart and deep thoughts”. Individuals who avoided TCM considered local TCM doctors to be “too mysterious and too wonderful” or

“too exaggerated.” They did not look for a matched doctor but instead self-medicated using Chinese herbs, as a supplement to conventional treatment.

The majority of the Chinese patients perceived CAM to have positive effects, that included increasing energy, reduced side effects, and help for them to feel balanced. Others continued using CAM as long as no adverse reactions existed.

Balancing Cost and Benefits

Cost was a crucial factor in determining Chinese cancer patients' CAM use because TCM was not covered by the provincial medical insurance plan in BC. With most of the informants being unemployed as a consequence of their illness, their financial resources were limited. TCM diagnosis and prescription fees varied among TCM practitioners. A free consultation could be obtained if the patient purchased herbs in a TCM herb store. TCM herbs may cost about \$20 ~ \$75 CAD per visit (each prescription could last a week). While many informants returned to China, Hong Kong, or Taiwan for less expensive medicine, others reduced the amount of CAM they were using or discontinued CAM after a short period of use because of the exorbitant cost. According to a 44-year old female with breast cancer, “even though the remedies are effective, they are costly. It costs \$10 - \$12 CAD a day; I could not afford to take the remedies on a long term basis.”

DISCUSSION

The purpose of this qualitative study was to investigate CAM use by Chinese cancer patients in British Columbia, Canada. The sample was purposively selected, including those individuals who indicated having used any type of CAM. The results reveal that all 14 (100%) Chinese cancer patients in this study used a combination of TCM and Western medicine following their cancer diagnosis. This finding highlights the impact of culture on individuals' selection of specific CAM modalities and suggests in this population that TCM is deeply rooted in the Chinese tradition. It is important that future health policies are sensitive and respectful of the influence of culture and ethnicity on individuals' health care experiences and treatment decisions, particularly in relation to CAM. A larger, national survey is needed to confirm this result and the pervasiveness of TCM as a CAM modality of cancer patients of Chinese ethnicity.

The literature on the use of CAM among ethnocultural groups indicates that Chinese cancer patients are most likely to use herbal remedies, use them concurrently with conventional cancer therapy, and learn about these remedies from friends, family members, or other patients, as well as from media reports. The Chinese cancer patients in this study provided further insights about the

pattern, reasons, meaning, as well as cultural and socioeconomic factors underpinning the use of CAM.

While the conceptualization of CAM varied among the informants, in general, CAM was understood to be anything that was non-Western medicine. Interestingly, some individuals who saw TCM as part of their cultural or lifestyle practices did not consider TCM as CAM.

One of the main reasons for using CAM, as identified by the Chinese patients was care for body, mind, and spirit. Their perception of conventional cancer treatment was that surgery and adjuvant therapy was “taking away” energy. Lee et al.’s (2000) study found that herbal remedies were the most popular among cancer patients and that individuals used plants and herbs with the purpose of restoring balance and increasing energy levels or *chi*, which is consistent with our findings. The need to maintain a holistic balance is important for Chinese, as health and well-being depends on the harmony among the physical, cognitive, and spiritual domains. This belief of the “holistic balance” needs to be addressed within the conventional cancer setting.

Another reason that underlies CAM use involved the failure of conventional medicine to manage the side effects of cancer and the conventional cancer treatments, such as fatigue, pain, and swelling, and to prevent a recurrence of cancer. Similar reasons were found by Cui et al. (2004), who conducted a survey of CAM use among more than 1,000 Chinese women with breast cancer in Shanghai.

Individuals of Chinese heritage value family and kinship. Although the majority of the Chinese patients indicated that they made their own decision, the support of family and friends was an important reason for using CAM, and the informants used their social network to gain information about CAM. Similar findings were found in Simpson’s qualitative study (2003), where family members had a great influence on health beliefs and CAM use in Chinese women with breast cancer in Hong Kong. Family members should be recognized and used as vehicles for health care support.

The CAM DM process was found to be a nonlinear and comprised of four distinct phases: fitting with the cultural belief framework/lifestyle, seeking information and clarification, evaluating the effectiveness of CAM use, and balancing the cost and benefits of CAM use.

Cultural beliefs appeared to have an impact on the decision to use CAM concurrently with conventional therapies, as was reported by other researchers (Liu et al., 1997; Hyodo et al., 2005; Tatsumura et al., 2003). According to Chinese beliefs, the use of conventional, Western medicine is appropriate to alleviate acute health problems, while TCM is more appropriate to treat chronic conditions in a more holistic way (Simpson, 2003). Thus, the combination of both types of therapies appears to have distinctive, yet complementary purposes that

make them appealing for cancer patients. The findings suggest that cancer care providers should understand cancer patients' cultural beliefs related to health, illness, and treatment methods, as well as support patients in their help-seeking behaviors, while communicating about CAM and its interactions with cancer treatment. Given the predominance of TCM utilization within this study population, cancer care providers in regions with a large Chinese population would benefit from becoming cognizant and familiar with the philosophies and treatments that comprise this traditional system of care. One recommendation is for professional associations to create continuing education opportunities on TCM as well as other CAM modalities for health care providers located in such regions.

The informants often revealed frustrations in seeking information about trustworthy TCM doctors in local areas. The majority of them were not aware that, in 2000, an official professional licensing authority was created to regulate the practice of TCM in BC. The professional body grants four types of licenses: Doctor of Traditional Chinese Medicine (Dr. TCM), Registered TCM practitioner (R.TCM.P.), Registered TCM herbalist (R.TCM.H.), and Registered Acupuncturist (R.Ac.). Information about local TCM doctors could be located from the Web site of the College of the TCM Practitioners and Acupuncturists of BC.

A few informants in the study approached CAM in a scientific manner (i.e., by reading reports, recording changes, being concerned about drug interactions), which is contrary to the findings of Simpson (2003), where Chinese people in Hong Kong will not seek clarification and would only accept information that fits their belief system. Nevertheless, the study informants' lack of knowledge about the potential side effects of select CAM therapies is consistent with the findings from Liu et al's (1997) study in Taiwan. The findings of this study suggest that health care professionals should find ways to support Chinese patients in making safe and informed decisions about TCM/CAM in a way that is respectful of their belief system.

Furthermore, Chinese cancer patients may not conceptualize adverse effects in the same way as do Western health care professionals. The majority of the informants considered TCM as having no harmful effects beyond a yin/yang imbalance. An exploration of the conceptualization of adverse effects or side effects by Chinese cancer patients would be helpful for providing further insights into these individuals' distinct beliefs about the potential harm from CAM within a Western health care system.

For many individuals, the cost of CAM was expensive. In BC, the College of TCM Practitioners and Acupuncturists does not require a common scale of professional fees. The informants of this study, thus, live between two worlds. They either ordered CAM products from or traveled to their places of origin for

health care and the cost of CAM/TCM may pose a significant hardship for patients. Cancer patients, in particular, are vulnerable to unsubstantiated curative claims and may be taken advantage of by deceitful practitioners. Conventional health care providers can be supportive by discussing with their patients their use of CAM and how it may have a negative impact on their own and their family's finances.

For health care professionals, the implications of the study include a need to investigate their patients' reasons for seeking CAM and the need to be aware of socio-cultural factors behind the use of CAM, during and after cancer treatment, as it affects patients' safety and health outcomes. Health care professionals should support their patients in making better decisions that are evidence-based and congruent with their own belief systems, facilitating their patients in using safe, proven, and inexpensive CAM, and communicating in a partnership with their patients and with CAM providers (Jonas, Linde, Walach, 1999).

The qualitative study brought into light the findings that would only be applicable to Chinese individuals living with cancer in BC, and would provide a useful foundation to conduct a broader survey of TCM use by Chinese cancer patients in Canada.

REFERENCES

- Alferi, S. M., Antoni, M. H., Ironson, G., Kilbourn, K. M., & Carver, C. S. (2001). Factors predicting the use of complementary therapies in a multi-ethnic sample of early-stage breast cancer patients. *Journal of the American Medical Women's Association*, 56(3), 120-123, 126.
- Balneaves, L.G. (2002). *Alternative and complementary therapy use by women living with breast cancer: A test of three models*. Unpublished doctoral dissertation, University of British Columbia, Canada.
- Berger, J.T. (1998). Culture and ethnicity in clinical care. *Archives of Internal Medicine*, 158, 2085-2090.
- Boon, H., Brown, J. B., Gavin, A., Kennard, M. A., & Stewart, M. (1999). Breast cancer survivors' perceptions of complementary/alternative medicine (CAM): Making the decision to use or not to use. *Qualitative Health Research*, 9(5), 639-653.
- Chen, M.S. (1999). Informal care and the empowerment of minority communities: Comparisons between the USA and the UK. *Ethnicity & Health*, 4(3), 139-151.
- Chiu, L. (2005). *Immigrant issues and use of alternative healing system by Chinese immigrant women in Vancouver*. Unpublished manuscript, University of British Columbia, Canada.
- Chiu, L., Ganesan, S. Morrow, M., & Clark, N. (2005). Spiritual choice of mental health services by immigrant women with a serious mental illness in Vancouver. *Transcultural Psychiatry*, 42(4), 630-656.
- Chiu, L. (2001). Spiritual resources of Chinese immigrants with breast cancer in the USA. *International Journal of Nursing Studies*, 38, 175-184.
- Clark, M. (1995). Biomedicine meet ethnomedicine. *Healthcare Forum Journal*, May-June, 20-29.
- Cui, Y., Shu, X.O., Gao, Y., Wen, W., Ruan, Z.X., Jin, F., & Zheng, W.. (2004). Use of complementary and alternative medicine by Chinese women with breast cancer. *Breast Cancer Research & Treatment*, 85(3):263-70.

- Ernst, E. & Cassileth, B. R. (1998). The prevalence of complementary/alternative medicine in cancer: A systematic review. *Cancer, 83*, 777-782.
- Furnham, A. & Forey, J. (1994). The attitudes, behaviors and beliefs of patients of conventional vs. complementary (alternative) medicine. *Journal of Clinical Psychology, 50*(3), 458-469.
- Hilton, B.A., Grewal, S., Popatia, N., Bottorff, J.L., Johnson, J.L., Clarke, H., Venables, L.J., Bilkhu, S., & Sumel, P. (2001). The desi ways: Traditional health practices of South Asian women in Canada. *Health Care Women International, 22*(6), 553-567.
- Hislop, T. G., Inrig, K. M., Bajdik, C. D., Deschamps, M., Tu, S., & Taylor, V. M. (2003). *Journal of Immigrant Health, 5*(4), 143-152.
- Hyodo, I., Amano, N., Eguchi, K., Narabayashi, M., Imanishi, J., Hirai, M., Nakano, T., & Takashima, S. (2005). Nation wide survey on complementary and alternative medicine in cancer patients in Japan. *Journal of Clinical Oncology, 23*(12), 2645-2654.
- Kelner, M. & Wellman, B. (1997). Health care and consumer choice: Medical and alternative therapies. *Social Science & Medicine, 45*(2), 203-212.
- Lee, M. M., Lin, S. S., Wrench, M. R., Adler, S. R., & Eisenberg, D. (2000). Alternative therapies used by women with breast cancer in four ethnic populations. *Journal of the National Cancer Institute, 92*, 42-47.
- Leis, A., Verhoef, M., Deschamps, M., Tan, L. Deward, R., & Doll, R. (2003). What determines the use of complementary and alternative therapies by Canadian cancer patients? *Focus on Alternative and complementary Therapies, 8*(1), 149-150.
- Liu, J. M., Chu, H. C., Chin, Y. H., Chen, Y. M., Hsieh, R. K., Chiou, T. J., & Whang-Peng, J. (1997). Cross sectional study of use of alternative medicine in Chinese cancer patients. *Japanese Journal of Clinical Oncology, 27*, 37-41.
- Maskarinec, G., Shumay, D. M., Kakai, H., & Gotay, C. C. (2000). Ethnic differences in complementary and alternative medicine use among cancer patients. *Journal of Alternative & Complementary Medicine, 6*(6), 531-538.

- Ray-Mazumder, S. (2001). Role of gender, insurance status and culture in attitudes and health behavior in a US Chinese student population. *Ethnicity & Health*, 6, 197-209.
- Statistics Canada. (1996). *National Public Health Survey [NPHS]*. Ottawa, ON.
- Spector, R.E. (1995). Cultural concepts of women's health and health-promoting behaviors. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 24(3), 241-245.
- Tatsumura, Y., Maskarinec, G., Shumay, D. M., & Kakai, H. (2003). Religious and spiritual resources, CAM, and conventional treatment in the lives of cancer patients. *Alternative Therapy in Health & Medicine*, 9(3):64-71.
- Wing, D.M. (1998). A comparison of traditional folk healing concepts with Contemporary healing concepts. *Journal of Community Health Nursing*, 15(3), 143-154.