USING SOCIAL COGNITIVE THEORY TO UNDERSTAND EXERCISE MAINTENANCE IN WOMEN BREAST CANCER SURVIVORS ADOPTING GUOLIN QIGONG

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Abstract

The purpose of this study is to explore and understand the exercise maintenance in women with breast cancer survivors adopting Guolin Qigong using the Social Cognitive Theory related constructs. A qualitative approach using in-depth interviews were employed in this study. 22 participants of the Malaysia Guolin Qigong Association from five regions in Peninsular Malaysia were purposely selected to participate in this study. Data was collected through a series of audio-tapes during the interview sessions. They were asked on how do they maintain their Guolin Qigong exercise. Three themes related to the Social Cognitive Theory constructs emerged from the data collected. (i) Personal Factors; (ii) Environmental Factors and (iii) Tailored Program. The belief in Guolin Qigong or in an exercise program is crucial in helping one to maintain with the exercise program and this findings is consistent with literature that those responded favourably to an exercise will have greater positive attitudes to exercise maintenance. To keep these women maintain the exercise it is important that these women have friends who understand them better to share their experiences related to their disease. It has been suggested that connecting to other survivors contributes to the survivors’ positive well-being and to deal with their everyday living. Lastly, the type of exercise should be tailored to the physical condition of these women to keep them sustain the exercise. This theory can be used by the health practitioners to develop more effective interventions for increasing exercise maintenance in sedentary cancer survivors by taking into special attention personal factors particularly one’s beliefs and inner motivation. Having to embark and engage into an exercise program of their preferred choice will help one to maintain an exercise program.

Keywords: breast cancer; survivors; Guolin Qigong; Social Cognitive Theory
Introduction

Breast cancer is the leading cause of cancer among women (American Cancer Society, 2008) and the cause of cancer death among females in economically developing countries (Ferlay et al, 2008). The incidence of breast cancer has escalated in most Asian countries over the past two decades (Sim et al., 2011). Cancer has increased in these countries due to changes in reproductive factors, environmental exposures, and lifestyle such as dietary intake and physical activity which have all been proposed to explain the escalation trend (Bhoo Pathy et al., 2011). In Malaysia, the overall age-standardized incidence rate was 46.2 per 100,000 women with more than 40% of patients presented at advanced stages (National Cancer Registry, 2011). Incidence of breast cancer varies by ethnicity: the age-standardized ratio (ASR) per 100,000 population was 38.1, 33.7 and 25.4 among the Chinese, Indian and Malay women, respectively (Pathy et al., 2011; Rajan et al., 2011).

Substantially, with the increased number of breast cancer patients and survivors, it means that cancer must now be managed as a chronic illness and the community must find ways to modify the health behaviour of cancer patients and survivors after diagnosis. Once diagnosed with breast cancer, a breast cancer patient will be given the conventional treatments such as surgery, chemotherapy and radiation therapy. Apparently, not only the diagnosis of the disease itself affects the lives of breast cancer patients, but the presence of depression and treatments has been also been associated negatively with the quality of life (QoL) in breast cancer survivors (Frazzetto et al., 2012). These conventional treatments given to breast cancer patients are vastly more toxic and invasive than treatments for other prevalent chronic diseases, such as diabetes and heart disease. The process of treatment such as chemotherapy and radiation therapy destroys normal healthy tissues and results in side effects including physical weakness such as muscle wasting and emotional strains such as anxiety, depression, and fatigue which result in immobility, loss of physical fitness and balance with the whole body feeling much weakened (Rao & Wahnefried, 2006).

Physical exercise has been suggested as a possible intervention for cancer-related symptoms and offers numerous advantages for quality of life outcomes during and after cancer treatment (American Cancer Society, 2007). In several studies, exercise has shown positive effects in improving quality of life and was highlighted in their studies of a close association between physical activities with the quality of life of these cancer patients and survivors (Uğur and Yag’l, 2010; Bicego et al., 2009). Although breast cancer patients may have particular limitations and problems associated with the disease and treatment, they will still be able to reap many of the benefits associated with most forms of physical exercise. Several studies have shown that, regular exercise can reduce many of the disturbances caused by cancer treatment and have beneficial effects on an individual’s quality of life (Ingram, Wessel, & Courneya, 2010; Kaltsatou, Mameletzi, & Douka, 2011; Vallance, Courneya, Plotnikoff, Dinu, & Mackey, 2008).

Even with vast past studies showing the benefits of exercise towards physical and psychological benefits for the cancer patients and survivors (Ingram et al., 2010; Peeters et al., 2009), but when a suggestion to exercise is recommended, it seems to be so difficult for some cancer survivors to get into exercise. Therefore, health care providers, educators, support groups and exercise trainers need to recommend exercise regimens that are tailored to the physical and psychological characteristics of these cancer patients and survivors. Further understanding of why breast cancer women held certain exercise beliefs, knowledge, attitudes and behaviour associated to exercise could result in a more-effective public health’s interventions to promote exercise maintenance among this vulnerable
population. As part of a larger study concerning the experience of learning Guolin Qigong among breast cancer survivors, for the present paper, this paper only reports on the exploration of Social Cognitive Theory Constructs in exercise maintenance among women breast cancer survivors adopting Guolin Qigong exercise.

Methodology

Design of the study
Qualitative approach using in-depth interviews was used to draw upon the rich descriptive of the life experience of breast cancer exercise maintenance.

Sampling
Criterion, purposive and snowballing techniques were used to recruit the participants for the interviews. The participants’ criteria were: (1) female breast cancer survivors; (2) members of Malaysia Guolin Qigong Association; and (3) have adopted Guolin Qigong for more than 6 months. All the participants were well informed about the study and consent forms were given prior to the interviews.

Twenty-two breast cancer survivors from the Malaysia Guolin Qigong Association from the five regions, namely South (Johor Bahru), Upper North (Butterworth) and North (Ipoh), East (Kota Bahru) and Central (Klang Valley) participated in the in-depth interview. The researcher was first introduced to the Qigong Master by one of the cancer survivors. The researcher mentioned to the Qigong Master the study purpose and the inclusion criteria of who could become participant of the study: (1) adult female breast cancer survivors known to have adopted Guolin Qigong for more than 6 months; (2) capable and willing to share her experience in practicing Guolin Qigong; (3) speak English, Malay or Chinese. The contact numbers of four participants within Klang Valley were first obtained from the Master. The researcher contacted the participants to invite them to participate in the study. All the participants contacted in Klang Valley agreed to participate and to be interviewed.

During the data collection in Klang Valley, the researcher was invited to participate in a week’s course on Guolin Qigong theory and practical session with the Guolin Qigong Great Grand Master from Beijing, China at the Kuala Lumpur Qigong Headquarters. The researcher was introduced to several Qigong instructors and assistant instructors from Klang Valley by the Vice President of Guolin Qigong during the workshop. Later, snowballing sampling technique was employed in Klang Valley with four more participants meeting the criteria including the instructors and assistant instructors. Two weeks after the intensive course, the researcher was invited by the President of Malaysia Guolin Qigong Association to join the Beijing Guolin Qigong Great Grand Master in her travels to selected regions in Peninsular Malaysia to meet with the potential participants from other regions. Fifteen participants were identified through the respective regional Qigong Master. The purpose of the study was mentioned to the participants and a consent letter were given to the participants from other regions. Appointments were made with the regional participants to have the in-depth interview at the participants’ selected venue and time.

Data collection
In-depth interviews were held with participants to gain insight on how they maintain the exercise program. Written consents were obtained from all participants before the in-depth interview was
conducted. All the participants were given the opportunities to withdraw from the interview at any time. Socio-demographic data was collected via a brief written questionnaire at the end of the interview.

The questions were designed using Social Cognitive Theory constructs to understand exercise maintenance among these women. The interviews were conducted by the first researcher in a mixture of English, Bahasa Melayu and Chinese, as the breast cancer Guolin Qigong exercisers from North and South region commonly speak a mixture of English and Chinese and participants from the East region speaks Bahasa Melayu and English. The researcher is fluent in English, Bahasa Melayu and Chinese with spoken language of Cantonese, Hokkien and Mandarin and shared a common cultural heritage with the participants. This proved and helped in establishing the rapport and confidence of the participants who openly shared their stories and point of view. The interviews were tape recorded with the consent of the participants.

Data analysis

The tape recorded interviews were transcribed verbatim for English and Bahasa Melayu. Interviews in English and Bahasa Melayu were audio-recorded and transcribed within two days after the interview to establish confirmability. The interviews in Chinese were translated and transcribed by one bilingual person. The interviews in Chinese at the North Region and South Region were translated and transcribed by a language expert back in Klang Valley. The transcripts were read repeatedly and the recorded raw data were saved into the software QSR Nvivo 7.0. In the analyses, the computer program software QSR Nvivo 7 was used to structure the coded material into sets of categories. The interview material was first read in its entirety. The entire interviews were then coded at a very general level in order to condense the data into analyzable units or categories. In the next phase of analysis, these preliminary categories were subjected to a “constant comparative analysis” in order to condense them into fewer and more comprehensive categories. These categories were then sorted, organized and reorganized into a framework of main themes, giving a deeper description of the experiences. The usage of QSR Nvivo 7 was to facilitate in the analysis of themes and systematic comparisons across transcripts.

Findings

22 participants were interviewed from four regions in Peninsular Malaysia determined by the Association. The interviews were based on the guided questionnaire merely on how the participants maintain their Guolin Qigong exercise. Three major themes related to the explanatory constructs emerged: (i) Personal factors; (ii) Environmental factors and (iii) Tailored Program.

Exercise Maintenance Using Social Cognitive Theory

(i) Personal Factors

Fear of recurrence often lingers in most of the women’s mind that led them to maintain the exercise as to ensure that their body are well fed with oxygen with this exercise. A majority of the informants reported that their belief in Guolin Qigong in enhancing their health and increasing their stamina and energy level. These women felt the physical and psychological changes in them after months and years of experiencing and engaging in this exercise program. They felt good after the workout.
Having strong and positive internal motivation helps these women to maintain with the exercise. They often self-talk to remind themselves about the benefits of exercise in enhancing their quality of life. They want to be independent and to be strong again.

(ii) Environmental Factors
These women reported that by coming out to do the Guolin Qigong, it provided the opportunity for these women to share their cancer experience and most importantly they realized that they were not alone and able to dispel feelings of loneliness experienced by them. Social connections with other survivors during exercise helps to establish an empathetic environment and sharing of information about cancer among them. These women shared the same sentiments of the needs to proper guidance, and to gain latest information from a knowledgeable master in their workout.

(iii) Tailored Program
These women further shared the general consensus that Guolin Qigong was gentle in nature, not vigorous and most important this Guolin Qigong was specifically tailored for cancer patients and survivors. Majority felt that this exercise suits them, slow but effective in enhancing their energy level.

Discussion

The belief in Guolin Qigong to “cure” their cancer is based from observing others played a big role in determining exercise maintenance. This was confirmed by Kwan and Bryan (2010) that those who responded favourably to an exercise will have greater self-efficacy and more positive attitudes to exercise maintenance. To keep these women going, they felt that by maintaining the exercise, they are able to keep intact with other survivors as mirrored by Parry (2008) that connecting to other survivors contributes to their positively well-being and to demonstrate the capability in thriving their everyday living. Lastly, the type of exercise should be tailored to the physical condition of these women to keep them sustaining with the exercise.

Conclusion

The theory can be used to develop more effective interventions for increasing exercise maintenance in sedentary cancer survivors giving special attention to personal factors such as beliefs and enhance positive internal motivation. Besides that to ensure exercise maintenance among breast cancer patients and survivors, the exercise program has to be tailored to the needs of the physical and psychological conditions of the exerciser. By understanding which explanatory constructs determine exercise adherence among these women, health professional can help this population in planning the methods to help them stick with an exercise purportedly to be of their preference.

References

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