



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

journal homepage: [www.elsevierhealth.com/journals/ctim](http://www.elsevierhealth.com/journals/ctim)



# Effects of symptoms and complementary and alternative medicine use on the yang deficiency pattern among breast cancer patients receiving chemotherapy



Sheng-Miauh Huang<sup>a</sup>, Li-Yin Chien<sup>b</sup>, Cheng-Jeng Tai<sup>c,d</sup>,  
Ping-Ho Chen<sup>e</sup>, Pei-Ju Lien<sup>f</sup>, Chen-Jei Tai<sup>e,g,\*</sup>

<sup>a</sup> Department of Nursing, Mackay Medical College, New Taipei City, Taiwan

<sup>b</sup> Institute of Clinical and Community Health Nursing, National Yang-Ming University, Taipei, Taiwan

<sup>c</sup> Division of Hematology and Oncology, Department of Internal Medicine, Taipei Medical University Hospital, Taiwan

<sup>d</sup> Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

<sup>e</sup> Department of Traditional Chinese Medicine, Taipei Medical University Hospital, Taiwan

<sup>f</sup> Department of Nursing, Taipei Veterans General Hospital, Taipei, Taiwan

<sup>g</sup> Department of OB/GYN, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

Available online 12 January 2015

## KEYWORDS

Meridian energy;  
Qi;  
Symptom;  
Complementary and  
alternative medicine;  
Breast cancer;  
Traditional Chinese  
medicine;  
Yang deficiency  
pattern

## Summary

**Background:** Based on traditional Chinese medicine (TCM) theory, yang deficiency pattern defined as an insufficiency of meridian energy (qi) is related to worsening disease symptoms. However, there is a lack of studies portraying the relationship among complementary and alternative medicine (CAM) use, symptoms, and meridian energy. Therefore, the primary purpose of this study was to describe the changes of CAM use, symptoms, and yang deficiency pattern among patients with breast cancer receiving chemotherapy. Additionally, the study explored factors predicting yang deficiency pattern.

**Method:** A longitudinal study was performed with 153 women with breast cancer at four teaching hospitals in northern Taiwan from June 1, 2009 to July 31, 2013. Researchers collected data before treatment and the 1st and 3rd months after chemotherapy. Yang deficiency pattern was

\* Corresponding author at: 252 Wu-Xing Street, Xin-Yi District, Taipei 110, Taiwan. Tel.: +886 2 2737 2181x3102; fax: +886 2 2704 5034.  
E-mail addresses: [r910862@yahoo.com.tw](mailto:r910862@yahoo.com.tw) (S.-M. Huang), [lychien@ym.edu.tw](mailto:lychien@ym.edu.tw) (L.-Y. Chien), [cjtai@tmu.edu.tw](mailto:cjtai@tmu.edu.tw) (C.-J. Tai),  
[hodazen@gmail.com](mailto:hodazen@gmail.com) (P.-H. Chen), [prlain@vghtpe.gov.tw](mailto:prlain@vghtpe.gov.tw) (P.-J. Lien), [chenjtai@tmu.edu.tw](mailto:chenjtai@tmu.edu.tw) (C.-J. Tai).

examined using the Meridian Energy Analysis Device Me-Pro. Symptom severity and interference were assessed using the MD Anderson Symptom Inventory-Taiwan version. CAM use was evaluated using the US National Center for Complementary and Alternative Medicine (NCCAM) classification. *Results:* Meridian energy remained essentially the same over the 3-month period as the difference was not statistically significant. As time went by, patients developed worsening symptom severity and interference. More than 66% of the patients used CAM during chemotherapy. Older women had lower overall meridian energy. The more severe the symptoms were, the lower the overall meridian energy was. The patients who used tai chi or qi gong had higher overall meridian energy and those who used prayer or spirituality had lower overall meridian energy.

*Conclusion and implications:* Symptom severity and interference among patients deteriorated during chemotherapy. Health providers should observe symptom changes and improve yang deficiency pattern. Whether or not use of CAM practices such as tai chi or qi gong improves the overall health of breast cancer patients on chemotherapy is worth further study.

© 2015 Elsevier Ltd. All rights reserved.

## Introduction

Based on the theories of traditional Chinese medicine (TCM), qi runs throughout the body via meridian vessels. Qi running through these vessels is regarded as meridian energy.<sup>1–4</sup> The health of an individual is viewed as a function of meridian energy.<sup>4–6</sup> Chinese medicine practitioners view pattern/syndrome type as a collection of symptoms or a syndrome that serves as a guide for TCM treatment.<sup>7,8</sup> Yang deficiency pattern reflects an insufficiency of meridian energy, which may be treated by TCM, acupuncture, or both to modulate meridian energy levels.<sup>9</sup> Nonetheless, the relationship between symptoms and meridian energy remains unclear because of insufficient scientific studies.

Of all cancers in Taiwan, breast carcinoma ranks first in incidence and fourth in mortality. Death due to breast carcinoma in 2001 and 2012 were 10.7 and 11.6 per 100,000 people in Taiwan. Although a trend toward increasing death rate is reported, the median age at death in Taiwan increased from 53 years per 100,000 in 2001 to 58 years per 100,000 in 2012.<sup>10</sup> Western medicine studies showed that chemotherapy provided hope for extending disease-free survival,<sup>11,12</sup> but patients receiving chemotherapy experience severe physical symptoms, including musculoskeletal pain, fatigue, and nausea.<sup>13–15</sup> TCM studies indicated cancer patients taking chemotherapy had deteriorating deficiency and stasis patterns during their treatments,<sup>16,17</sup> which implies that the cancer patients experienced severe symptoms and insufficiency of meridian energy.

The US National Center for Complementary and Alternative Medicine (NCCAM) classifies complementary and alternative therapies into two major groups, natural products and mind and body practices.<sup>18</sup> Cancer patients receiving conventional treatment used complementary and alternative medicine (CAM) frequently (prevalence, 25–83%).<sup>19,20</sup> Past studies have shown that CAM alleviated chemotherapy symptoms.<sup>21,22</sup> In Taiwan, the National Health Insurance system covers both modern medicine and TCM expenses in parallel. In TCM clinics, the use of qi and blood tonifying herbs is a commonly used prescription pattern to treat or control disease.<sup>23,24</sup> TCM use in the continuing care phase among patients with cancer in Taiwan is higher than TCM use in matched, cancer-free counterparts. TCM use during cancer care has increased considerably over the

past several years.<sup>25</sup> Some evidence shows that TCM doctors alleviated symptoms among patients by supplementing qi and activating blood circulation. Those studies focused only on exploring TCM treatment effects on symptoms, not on meridian energy.<sup>24,26</sup>

Very few, if any, prior studies described the changes of meridian energy during chemotherapy in cancer patients. Additionally, we found no studies linking symptoms, CAM use, and meridian energy directly. Thus, our study describes the changes of symptoms, CAM use, and meridian energy among patients with breast carcinoma receiving chemotherapy. Additionally, we investigated the effects of symptoms and CAM use on meridian energy after adjusting for potential confounders.

## Materials and methods

This was a longitudinal and observational study. We collected data before treatment, 1 month, and 3 months after chemotherapy using face-to-face interviews with structured questionnaires, medical chart reviews, and electrodermal measurements. The interviews were conducted either at the outpatient department or in the ward at the patients' convenience. The study was approved by the human subject review committee at each of the hospitals.

## Study participants

We recruited women with breast cancer who were 18 years or older and who were about to start chemotherapy. All patients in the study received 3-week cyclic anthracycline-based, taxane-based, or trastuzumab therapy for at least 3 months. The women joined the study during the period from June 2009 to July 2013 from two hospitals in Taipei City and two hospitals in Yilan county. Among the potential study candidates, 180 patients met the inclusion criteria during the study period. Of those patients, 22 patients refused to participate at the first contact. The remaining 158 patients completed the first interview. Another five patients stopped treatment ( $n=1$ ) or refused further participation ( $n=4$ ). As a result, 153 patients (84.0%) were enrolled. The

Download English Version:

<https://daneshyari.com/en/article/2628952>

Download Persian Version:

<https://daneshyari.com/article/2628952>

[Daneshyari.com](https://daneshyari.com)