

Current Usage of Traditional Chinese Medicine in the Management of Breast Cancer: A Practitioner's Perspective

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Abstract

Introduction. This qualitative study seeks to explore the role within the context of Australian breast cancer oncology treatments that traditional Chinese medicine (TCM) practitioners play in the treatment of breast cancer. **Methods.** Semistructured interviews were used on 2 groups: the first group was TCM practitioners who were recognized experts in breast cancer, and the second group consisted of TCM practitioners who treated breast cancer as part of their practice but were not recognized experts. Data analysis was achieved through grounded theory with open coding. **Results.** The main themes reported on here are the following: the role of TCM in the biomedical management of breast cancer, TCM strategies for the management of breast cancer, and the perceived holistic approach of the TCM practitioner and the importance of a TCM diagnosis in the role of breast cancer care. **Discussion.** The role of TCM in biomedical breast cancer management is a supportive one; however, this role is difficult as there is a lack of understanding of TCM by biomedical practitioners. The viewpoints of practitioners differed on key strategies of TCM: diagnosis, and treatment protocols. Patients sought the holistic approach of TCM practitioners as they felt it addressed all aspects of their health and not just the symptoms relating to breast cancer. **Conclusion.** The lack of an integrated medicine approach in relation to TCM makes it difficult to demonstrate the value of the contribution TCM can make to biomedicine in the field of breast care oncology. Effectiveness studies are needed that can accurately represent TCM in this field.

Keywords

traditional Chinese medicine (TCM), acupuncture, Chinese herbal medicine, breast cancer, integrative oncology care

Introduction

The incidence of breast cancer steadily climbed in Australia through the 1990s and then plateaued as the latest figures indicate a stable incidence.¹ Breast cancer is the fourth leading cause of death for women and the third highest incidence of cancer diagnosed in the total population. Traditional Chinese medicine (TCM) has been involved in the management of breast cancer and its associated symptoms for what appears its entire history.² Discussion of breast disease dates back to the Han dynasty (206 BC to 220 AD) and there is a body of literature from that time which discusses both the differentiation between benign and malignant growths and their prognosis.² In recent times, TCM has been used as an adjunct treatment for women with breast cancer, as conventional treatments such as chemotherapy and radiation therapy can leave the patient with unpleasant side effects, for example, nausea, vomiting, fatigue, loose bowel movements, and hair loss.³⁻⁵

The literature provides no exploration of the experience of TCM practitioners in the field of cancer treatment. There

have been, however, explorations of the experiences of patients; which is important in the context of this research as it establishes a demand for complementary therapies such as TCM in breast cancer management. Data presented in 2011 on the usage and effectiveness of acupuncture from the patient's perspective found that 73% of breast cancer patients used complementary and alternative medicine (CAM), of whom 36% were using acupuncture, while 77% of acupuncture patients were not reporting their acupuncture treatment to their oncologists. Sixty-seven percent of patients felt that acupuncture was beneficial.³ This holds interest for the question not asked or answered: why participants did not report their acupuncture treatments to their

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oncologist. It is difficult to clarify the role of the TCM practitioner in breast cancer management when there is no professional communication between the oncologist and the TCM practitioner, and the patient is not disclosing the use of acupuncture to the oncologist. There were no data in Beith et al³ on the stage, grading, and type of breast cancer the patients suffered; and no data reported on a TCM diagnosis. This missing information would provide us with a more developed picture of where, how, and for whom in the breast cancer spectrum acupuncture can be most effective.

The literature shows TCM's perceived effectiveness and usage by patients in the treatment of breast cancer and breast cancer-associated symptoms.³⁻⁷ The literature is very broad in its use of TCM terminology and shows no specificity in TCM diagnosis or treatment strategies, which means that determining exactly what makes the treatment effective is difficult. This lack of information and under reporting of usage by patients makes determining the current role that TCM plays in breast cancer management difficult to ascertain.

A qualitative study that examined the attitude of patients toward the usage of acupuncture for the relief of fatigue associated with breast cancer produced some discerning themes. What emerged from research by Seluzicki et al⁸ is that cost (money, time, effort) versus benefit was a major consideration for the use of acupuncture. This challenges the research by Beith et al,³ as the researchers report that 71% of patients would use acupuncture alongside biomedicine treatment if the costs were mitigated to zero, which indicates that only the financial aspect was a barrier to the patients. There are also conflicting themes on usage of acupuncture. Some patients say they would prefer it if it were to reduce the amount of biomedical pharmaceuticals, while some said they prefer the biomedicine intervention because they feared needles.⁸

The ambiguity of information in the literature suggests that research on the roles of TCM in breast cancer treatment needed a broader scope in gathering information. In the present study, we have adopted a qualitative methodology through semistructured interviewing, using a postpositivist perspective, to explore this topic.

The objective of the research was to obtain a perspective on how TCM practitioners view their role in treating breast cancer patients as well as their methods (usual treatment/management strategies) and their perceived outcomes. Their experiences of working with women with breast cancer will help us understand the role TCM does, and can, play in the treatment of breast cancer and the level of acceptance and integration of TCM in Australian breast care oncology.

Methods

This is a qualitative study that sought to understand the TCM practitioner's perspective on where in the health

care spectrum TCM belongs in the management of breast cancer.

The research received ethics approval from the University of Western Sydney Human Research Ethics Committee (HREC) (H10202) in May 2013.

Recruitment

The initial recruitment was by letter attachment to an email circulated to TCM practitioners via a TCM practitioner database. This database is an important communication hub for the Australian TCM community: It has an extensive database of TCM practitioners and is an excellent source for distribution of research recruitment material. This method of recruitment is limited to those that have access to email. The owner of the database confirmed that the database has a bias toward practitioners who have a strong grasp of the English language.

The participant selection criteria required TCM practitioners to be registered with Australian Health Practitioner Regulation Authority (AHPRA) or other health care practitioners using TCM modalities as part of breast cancer treatment. The recruitment for this research was based up a participant's particular background or treatment characteristics (experience treating breast cancer using TCM); this technique is called "purposive sampling."⁹

The recruitment process sought out 2 groups of candidates: TCM practitioners who are oncology specialists (phase 1) and are recognized experts in breast cancer by their peers and nonexpert practitioners (phase 2) who have treated breast cancer, but are not recognized as experts by their peers. The experts would have seen a minimum of 50 breast oncology patients. Three of them were educated to the PhD level, and 3 had specialized in oncology in China. The expert who did not have a PhD was an oncology specialist in China before moving to Australia. The nonexpert group would have at least seen 1 breast oncology patient. The highest level of education in the nonexpert group was a bachelor's degree. The reason for assembling the expert group in phase 1 was to ascertain best practices for TCM in the management of breast cancer, which could be compared with the nonexperts in phase 2 of the study.

To identify other participants who were not responsive to the initial advertisement circulated via the Chinese medicine practitioner database, "snowball" sampling was used.⁹ This method can provide access to a greater range of participants. Recruitment was ended when themes were being repeated and no new information was emerging from participants, meaning a level of saturation was reached.

Saturation was reached at 12 participants. The participants were TCM practitioners from New South Wales, Australia and China. Four participants were allocated to the expert group (E) for phase 1; 8 participants were allocated to the nonexpert group (G) of phase 2. There was a broad demographic in racial heritage, but all Australian participants

(n = 11) were Australian citizens. There was 1 participant from Beijing, China; in this case, the interview was conducted via Skype. Participants ranged in age from 30 to 75 years. Seven were female and 5 were male. All Australians participants were registered with AHPRA.

An interview guide was used for phases 1 and 2. The interview guide was designed to help the interview flow. Where applicable, the interviewees were asked to elaborate on certain answers, which were followed up with non-scripted questions.

Data analysis was done using grounded theory analysis with open coding.

Results

Background and Practice of Expert and Nonexpert Groups

The expert group in phase 1 used Chinese herbal medicine as their primary treatment strategy for breast cancer. They were inclined to consult modern literature with regard to treatment. E2 stated, "I use herbs in my formula that research says works," and used a combination of TCM classic formula with herbs that research has shown to have anti-cancer properties. Phase 2 participants were aware of modern research with regard to TCM and breast cancer management but did not actively incorporate it into treatment. G6 stated, "I've read the journals on herbs and acupuncture for cancer, yeah, but I only practice acupuncture and the points might not be good for my [TCM] diagnosis." The nonexpert group of phase 2 used predominantly acupuncture with some using Chinese herbal medicine in conjunction with acupuncture. Phase 2 participants did not always consult modern literature for their treatment strategy, instead relying on TCM diagnosis.

The Relationship Between TCM and Biomedicine in the Management of Breast Cancer

TCM Playing a Complementary Role to Biomedicine in the Treatment for Breast Cancer. The participants universally used TCM as an adjunct to modern biomedical breast oncology treatment. This was a strong theme that was consistent with all participants even if they held the belief that TCM should be used as primary care for breast cancer treatment. Among the expert group, it was common to work in a complementary capacity to biomedical breast oncology treatment. Participants stated that working in a complementary fashion with biomedicine can enhance a patient's outcomes. A participant (E2) from the expert group was very clear on this point. He held very strong views on the importance of seeking a biomedical diagnosis for breast cancer for 2 reasons: first, it is the safest option for the patient, and second, it helped with his treatment strategy.

They [the patients] are not very clear [on their diagnosis] and I say [to them] that you have to get further medical investigation and diagnose your breast cancer.

Among the nonexpert group, it was similarly important to obtain a biomedical diagnosis for breast cancer. This was more for the safety of the patient, because most from the nonexpert group considered that a biomedical diagnosis did not change their treatment strategy. A participant (G4) said when asked if the patient had a biomedicine diagnosis:

Yes. Definitely.

Researcher: "Do you remember what the diagnosis was?"

G4: "It was oestrogen positive breast cancer."

Researcher: "Do you know stage, and grading?"

The participant (G4) then elaborated,

I'm not really sure what the specific western diagnosis was; she had an operation though, and I saw her after that.

Communication With Oncologist. Both groups emphatically agreed that their role as a TCM practitioner was to work complementarily to biomedicine when treating breast cancer, but only 1 participant had actual dialogue with oncologists; and that was in an academic setting, not a clinical setting. Participant (E3) stated,

In the US and China I have had a dialogue with oncologists in regard to research.

When probed about the nature of the participant's (E3) relationship with oncologists in Australia:

I have sent letters stating my treatment, but I don't really get a response.

In the nonexpert group there were 2 other participants who sent letters to oncologists about the herbs and/or acupuncture points they were using on their mutual patient and why they were using that particular strategy. No oncologist had answered their letter; the participants said the only acknowledgment they received from an oncologist was when the oncologist advised the patient directly not to take herbs. A participant (G5) said,

If I'm prescribing herbs I'll write a covering letter and say please give that to your oncologist. The patient usually comes back and says the doctor says "yeah whatever."

A general consensus among both expert and nonexpert groups is that they believe that oncologists and doctors don't understand what TCM is and how it works, so they are quick to dismiss the possibility of its effectiveness. The patients

report to the practitioners that the oncologists fear that the herbal component of TCM may interfere with chemotherapy drugs. This lack of communication and transparency in the relationship between TCM practitioners and oncologists makes it difficult to define what level of support the TCM practitioners are offering the patient, builds a level of distrust between them and fails to identify opportunities for collaboration in the care of patients. A participant from the expert group (E1) stated,

Some Western doctors maybe they always advise people not to take any herbs, but some [patients] say they will still want it.

The use of herbal medicine to support breast cancer patients is a large part of TCM treatment. The distrust by oncologists in the usage of herbs for breast cancer is largely due to lack of knowledge of herb/drug interactions.¹⁰ Participants felt that to overcome the mistrust exhibited by oncologists toward Chinese herbal medicine more research is needed to prove both safety and efficacy of TCM herbs. With this research, the role of the TCM practitioner in the management of breast cancer may become more defined. A participant from nonexpert group (G5) stated,

We know it works but we need research to prove it to the oncologists and GP's.

TCM Strategies for the Management of Breast Cancer

The Use of Acupuncture in Breast Cancer Management. The use of acupuncture by the nonexpert group was mostly for side-effect relief. They were dealing with patients who were undergoing invasive therapies. G1 was quoted as saying

After the reconstructive surgery she was feeling more restricted from the scarring and everything. Acupuncture points Ren 17 and Large intestine 4 were used to promote the healing and to get the energy moving again.

She definitely had more yin signs going through the chemo, Yeah, you could . . . see it a bit in her tongue, and her pulse felt really thin; it felt more yin deficient at the time.

This shows the importance to a practitioner of the evolution of the patient through a series of different invasive treatments, and how they adapt their acupuncture prescription and lifestyle advice accordingly. Another participant discussed evolving an acupuncture strategy according to how the patient was presenting. Symptoms exhibited were crucial in shaping the acupuncture point prescription. G5 stated,

Sometimes they come in and they are emotionally exhausted from whatever treatments they are having or whatever is going

on in their life. In this instance I use points from the spleen and heart channels to boost their qi, and to help them to relax.

The Effective Use of Chinese Herbal Medicine for Breast Cancer. The majority of participants in both groups agreed that Chinese herbal medicine provided the best treatment for breast cancer patients. They also knew of herbal medicine that had anticancer properties; however, not all incorporated them into their treatment strategies. Among the expert group, the use and understanding of Chinese herbs with anticancer properties was universal, but only half of the nonexpert group knew of them and only some 3 practitioners incorporated them into their treatment strategy. When asked about their usage of Chinese herbs with anticancer properties, participant E1 answered,

I think the result is good, yeah, so I always use it.

It was also recognized by 3 participants in the expert group and 5 participants in the nonexpert group that Chinese herbal medicines that are considered yin tonics should not be used with estrogen-positive breast cancer patients. The reason not to use the yin tonics as reported by the participants is that they allegedly promote estrogen, and in an estrogen-positive breast cancer patient this can promote the growth of the tumor. Participant E2 from the group that believes that yin tonics should be avoided, stating that

Herbs that contain phytoestrogens you can't use, because they can provide clear evidence that the phytoestrogen promote the cancer to grow but they can't prove that you're not related to cancer chromosome. This remains a problem.

The group that is in favor of the use of yin tonics justifies their position by the presence of yin-deficient signs in their pattern differentiation. It is important to note that the participants who had no problems with yin tonics did not use herbal medicine as a treatment strategy. Participant G5 provided a good example of this,

Some are so yin deficient they appear menopausal. You need to nourish them. So I suggest a lot of yin rich foods.

The Holistic Role the TCM Practitioner Plays in Breast Cancer Management and the Importance of Having a TCM Diagnosis

Many themes emerged from interviewing TCM practitioners who have experience in treating breast cancer. The participants from both expert and nonexpert groups saw themselves as treating the whole body, and felt that this approach required a TCM diagnosis. Their role was seen as

very holistic in breast cancer management and the use of TCM in diagnosing patients was central to this. The participants saw their role in treating the patient as a whole, addressing their underlying symptoms, presenting symptoms, and emotions in a holistic approach; they were forthright about not curing cancer, but dealing with the patient as they presented, and their side effects from their disease and biomedical treatment. A participant (G1) was quoted as saying,

She was undergoing pretty serious treatment through the oncologist and I guess given that we're not technically supposed to treat cancer, I was comfortable treating just as I saw it from a TCM perspective [treating the whole body as it presented at the period of time].

G7 stated,

I see my role as holistic, if my patient has just had surgery then my treatment strategy would be to help her heal and build immunity to prevent infection. If she is tired from radiation I will boost her qi to give her more energy, and use points to promote sleep.

G4 stated,

Sometimes they [breast cancer patients] come in and lose it emotionally; I would then focus on all my treatment on relieving their stress. This could be just a few needles and spending the session chatting to her.

G8 stated,

I treated the shoulder (*biao*, or branch), but also looked at the deeper issues (*ben*, or root). After several treatments the patient's shoulder had improved, but so had a lot of other aspects of her health: her hot flushes were less frequent, her mouth was less dry, and she felt happier and had more energy. The patient no longer came in for shoulder treatments; the practitioner reported that she came in to improve her health and wellbeing.

Practitioner E4, who was interviewed via Skype, who treats only oncology patients, stated the importance of a TCM diagnosis to her:

We use both. We always use two diagnoses. The first is Chinese medicine diagnosis and the second is Western medicine.

This double diagnosis perspective is an important aspect of this theme as the participant has sophisticated, modern biomedical diagnostic equipment at her disposal, yet she still chose to seek a TCM diagnosis before the biomedical diagnosis. This participant had extensive experience in treating breast cancer, but her thoughts on the importance of a TCM diagnosis echoed that of the less experienced participants.

The significance of playing a holistic role in breast cancer management was the same in both participant groups.

Discussion

The Role of TCM in the Biomedical Treatment Framework of Breast Cancer

TCM's Role as an Adjunct Therapy. The use of acupuncture by patients suffering breast cancer in Australia is quite extensive; as previously reported.³ The participants in this research project believed that the reason for patients' seeking acupuncture or TCM treatment varied, and included both symptoms of breast cancer, and support during breast cancer treatment. All but 1 participant felt that TCM worked in a complementary fashion to biomedicine. The majority of participants conveyed that their patients had or were having biomedical treatment as well as TCM, with the exception of 1 participant from the nonexpert group, who specifically said their patient refused further biomedical treatment and only wanted TCM.

Research into the use of CAM by breast cancer patients by Kremser et al¹¹ observed that the use of CAM, including TCM, was as an adjunct therapy to relieve the side effects of the cancer and the biomedical treatment for cancer; it was not used as an alternative to biomedicine. The participants were very careful and deliberate in voicing their position on breast cancer treatment and what role TCM plays in breast cancer treatment: TCM can help with side-effects in a complementary role to biomedical treatment, and that TCM does not specifically treat breast cancer. The participants were asked why they do not treat breast cancer to cure it: They stated that as TCM practitioners they are not allowed to claim they can cure or treat breast cancer, and fear litigation should they make such claims.

Issues That Prevent TCM and Biomedicine From Having a True Complementary Relationship. There is a demand from breast cancer patients for TCM and other CAM therapies.^{3,10-12} To ignore this patient demand could prove detrimental to the well-being of the patient as they may seek it from an unregistered, unreliable operator.¹⁰ It was a common feature of users of TCM and other CAM therapies not to discuss this use with their oncologist.¹¹ Based on the reports of the study participants, the medical discipline of oncology appears to respond to breast cancer patient preferences by ignoring them or by forbidding their use. Breast cancer patients surveyed reported feeling strongly enough about using TCM that they are either ignoring the advice of their oncologist and seeking TCM, or else they sense the distrust that the oncologist and other biomedicine practitioners have toward TCM and choose not to disclose their TCM use. This issue is potentially serious as the patients could receive poor information that could jeopardise their health and their treatment.

To encourage open use of TCM by breast cancer patients, oncologists would benefit from becoming more knowledgeable about the most popular remedies and where to find practitioners with expertise, and reliable information for themselves and their patients.¹⁰

Currently, the role of acupuncture is as an adjunct treatment to breast cancer³⁻⁵ and is being increasingly explored for integration in oncology care. Chinese herbal medicine is also recognized as an adjunct treatment due to the anticancer properties that some herbs possess.^{13,14} The method in which Chinese herbal medicine is used in biomedical treatment appears to be positive, but according to the statements of our research participants, the model of integration does not use the skills of the TCM practitioner. Herb-drug interactions are not sufficiently researched to exclude Chinese herbs as having a negative impact on chemotherapy regimens, which may explain the high level of caution on the part of oncologists to the concurrent use of herbal medicines.

TCM Strategies for the Management of Breast Cancer

Chinese Herbal Medicine for Breast Cancer. The use of formulations or multiple component prescriptions was common among the group that used Chinese herbal medicine, but the classical formulations in their original form were only used by one participant. The remaining participants who used Chinese herbal medicine altered the original formulation. When the TCM practitioners altered a formula for a breast cancer patient, they reported adding components shown to have anticancer properties in the scientific literature.

One such component is *bai hua she she cao* (*Oldenlandia diffusa*).^{15,16} This herb was a common addition for breast cancer patients because it inhibits the growth of Ras oncogene-transformed R6 cells at a dosage that is not toxic to the co-cultivated normal fibroblasts. This ability to retard growth of the cancer cell without harming surrounding normal cells is just one example of the anticancer actions of this herb.¹⁴

Traditional Chinese herbal medicine uses polypharmacy through formulas; a common formula that was mentioned by participants was *Xiao Chai Hu Tang*. This formula is understood to travel along the liver channel, which goes through the breast.¹⁷ A study by Chang¹⁵ discusses the effective use of Chinese herbal formula: "TCM usually uses herbal formulas and most useful TCM formulas for patients with cancer contain herbs with immunopotentiating activity from its polysaccharide content." One such formula that Chang mentions with this property is *Xiao Chai Hu Tang*. When treating patients suffering breast cancer, who may have undergone chemotherapy or an operation, it is common they will have compromised immune systems. The strategy of using *Xiao Chai Hu Tang* alongside anticancer herbs is thought to stimulate the immune system.^{15,18-21}

Chinese herbal medicine can have positive effects in managing breast cancer and its associated symptoms. However, some participants feel that certain herb groups should be avoided in certain breast cancer types. The participants who used Chinese herbal medicine felt that herbs that raise estrogen levels (ie, in TCM terms, yin tonics) should be avoided in estrogen-positive breast cancer patients. This was not a theme that was strong among all participants, as there were participants who did not know the complete biomedical diagnosis of their breast cancer patient. Among the participants who had an understanding of the biomedical framework of breast cancer there were still differing views on whether to use herbs that could raise estrogen with patients that had estrogen positive breast cancer.

The decision by some participants to exclude herbs that elevate estrogen is congruent with current literature. Ferulic acid, the active component of *dang gui* (*Angelica sinensis*) was shown to stimulate cancer cells that were estrogen receptor positive and HER2 positive.¹³ This research concluded that ferulic acid causes human breast cancer cell proliferation by upregulation of HER2 and stimulation of estrogen receptor expression.

Acupuncture as a Strategy for the Management of Breast Cancer. The use of acupuncture for breast cancer treatment/management was not unanimously regarded by participants. Only one of the expert participants used acupuncture in any form, but the entire nonexpert group used acupuncture for breast cancer management and symptom-related treatment. The nonuse of acupuncture in treatment by the majority of the expert group is a reflection on their specialist training in herbal medicine; it does not reflect the research on acupuncture for adjunct treatment for women suffering breast cancer. Acupuncture is often used because conventional treatments such as chemotherapy and radiation therapy can leave the patient with unpleasant side effects, such as nausea, vomiting, fatigue, loose bowel movements, and hair loss.^{3-5,22-25}

The Holistic Role of the TCM Practitioner and the Importance of the Differential Diagnosis

The concept of holism in clinical practice was discussed in the 1960s and 1970s.²⁶ Holism in health care was born due to the reported limitations and dangers of the reductionist nature of biomedicine and the pharmaceutical industry. It was argued that holism in clinical practice should take in to consideration the following factors: the view that mind, body, and spirit make up a whole unit; a positive view that health is well-being; the importance of health education; a reciprocal relationship between practitioner and patient; and, aiding the body's self-healing mechanism as a treatment strategy.²⁶ These views were demonstrated in some fashion as a strong theme among the participants in this research project. When TCM is distilled down to its most

basic principles, it is about the balancing of yin and yang within the patient's body, between the body and mind, and between the body and external world.²⁷

The literature on patient perspectives in seeking an acupuncture treatment²⁸ supported the participants view on patients using TCM for its holistic approach. Of the respondents in the study by Gould and McPherson²⁸ some (42%) noted that their initial reason for treatment had changed; half of the respondents had changed their focus to general health and well-being. This is consistent with TCM holistic practice and the *ben biao* (root and branch) approach. Participants in this research project stated that their role changed with the patient as the patient became aware of what TCM is capable of. Participant G8 had a patient who came in for shoulder pain; the patient was also undergoing treatment for breast cancer. G8 treated the shoulder (*biao*), but also looked at the deeper issues (*ben*). The patient no longer came in for shoulder treatments; the practitioner reported that she came in to improve her health and well-being.

The aspect of TCM responding to changing signs and symptoms in relation the changing stages of cancer growth is explained by Parekh et al²⁹:

The age-old holistic approach employed by Chinese practitioners proposes that a multitude of events are key to returning a patient to a healthy state; where cancer therapy is concerned these primarily include an interplay between the induction of apoptosis/cell-cycle arrest, inhibition of angiogenesis, overcoming multidrug resistance (MDR), and boosting the immune system.

The above quote highlights the changing stages of cancer growth, and how these changes affect the body. The key word in the quote by Parekh et al²⁹ is "interplay"; they recognize that the TCM approach has the capacity to induce apoptosis while arresting angiogenesis, they boost the immunity to strengthen the body to overcome multidrug resistance. Parekh and colleagues argue that the cancer growth cycle shows the many ways that cancer changes the body, and how the body copes with these changes; participants reported that as healthcare practitioners it is essential to look at how these changes manifest and to obtain the full information the practitioner needs to look at the body holistically, and not segment cancer stages or body parts. The participants in the research reported that they saw their role as holistic and sought to boost immunity, for example, as part of a patient's recovery from breast cancer-related surgical procedures to prevent infection and illness, and also as a method of prolonging remission.

Conclusion

Traditional Chinese medicine plays a supportive role in breast cancer treatment to biomedicine, but participants feel

their role is underused. The evidence on acupuncture, and the extensive pharmacopoeia illuminate the potential for TCM to be used as an adjunct to biomedicine in the treatment of breast cancer. It was reported that the participants in the nonexpert group were using acupuncture as supportive care for breast cancer; however, the all the experts interviewed use herbal medicine exclusively. More research into Chinese herbal medicine for the safety and efficacy of its use in conjunction with biomedical treatment is warranted to better evaluate the contributions of herbal medicine to cancer therapy.

Participants saw their role as holistic in breast cancer and that their TCM diagnosis was important. The holistic nature of TCM means it is diverse in its application. The treatment and management of breast cancer can vary from one practitioner to another, their pattern differentiation and diagnosis can also differ among practitioners. There were also contrary opinions on the best treatment available. Among the TCM practitioners who were specialist herbalists there were herbs and formulae that were prominent, but there were also some differing perspectives on altering formulae.

The participants in the research were not unanimous in their views on diagnosis, treatment strategies, acupuncture points, or herbal formulas. Without such uniformity in treatment strategies it is difficult to demonstrate the value of integrating TCM into biomedicine for breast care oncology. The ambiguity and the practice of prioritizing individual and personally tailored diagnosis and treatments used in TCM is regarded as a hindrance in furthering the role of TCM in oncology while increasing its attraction to patients. The lack of communication between TCM practitioners and oncologists means that there is little accompanying explanation of TCM therapies administered to the breast cancer patient. As reported by TCM practitioners, oncologists do not seek to make an informed decision on the patient using TCM as an adjunct and subsequently advise to cease the TCM therapy as a cautionary measure. Greater knowledge of TCM research by oncologists could provide patients with informed opinions rather than cautious skepticism; then the majority of patients who do not report their use of acupuncture to their oncologists may be more open about it, ultimately creating a safer outcome for patients.

Effectiveness studies are needed that can accurately represent TCM in this field. An area that was discussed extensively by participants was the usage of TCM as an adjunct therapy by breast cancer patients, despite the apparent distrust by oncologists of CAM therapies such as TCM. Further qualitative research needs to be undertaken to understand how to best integrate TCM into biomedicine for the treatment and management of breast cancer. Perhaps different models of care could be the subject of research to establish the patient experience of care as well as the outcomes in relation to quality of life, remission, and longevity.

There are some limitations to this research. The use of a participant from Beijing, China may have added variability to the results, and decreases the relevance of the study for the Australian context. There was not enough information on the specificity of the biomedical breast cancer diagnosis making it difficult to ascertain where TCM intervention was most effective. There was not enough information on the specificity of the biomedical breast cancer diagnosis making it difficult to ascertain where TCM intervention was most effective. The study has, however, opened up discussion in an underresearched field and pointed to useful areas for future dialogue and research.

Declaration of Conflicting Interests

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References

1. Australian Institute of Health and Welfare. *Australia's Health 2012* (Australia's Health Series No. 13. Cat. No. AUS 156). Canberra, ACT: Australian Institute of Health and Welfare; 2012.
2. Marchment R. *Gynaecology Revisited: Obstetrics and Gynaecology for Practitioner of Chinese Medicine*. Sydney, New South Wales, Australia: Elsevier; 2007.
3. Beith JM, Oh B, Hale AK, Venkateswaran R. Acupuncture use in women with breast cancer. *Med Acupuncture*. 2011;23:151-157.
4. Carmady B, Smith CA. Use of Chinese medicine by cancer patients: a review of surveys. *Chin Med*. 2011;6(22):8.
5. Cui Y, Shu XO, Gao Y, et al. Use of complementary and alternative medicine by Chinese women with breast cancer. *Breast Cancer Res Treat*. 2004;85:263-270.
6. Johnston MF, Xiao B, Hui KK. Acupuncture and fatigue: current basis for shared communication between breast cancer survivors and providers. *J Cancer Surv*. 2007;1:306-312.
7. Chen Z, Gu K, Zheng Y, Zheng W, Lu W, Shu XO. The use of complementary and alternative medicine among Chinese women with breast cancer. *J Altern Complement Med*. 2008;14:1049-1055.
8. Seluzicki C, Mackenzie E, Barg F, Leed R, Bowman M, Mao J. P05.63. Perspectives of breast cancer survivors about participating in an acupuncture clinical trial for hot flashes: a qualitative study. *BMC Complement Altern Med*. 2012;12(suppl 1):P423.
9. Liamputtong P. *Qualitative Research Methods*. Melbourne, Victoria, Australia: Oxford University Press; 2009.
10. Cassillete BR, Deng G. Complementary and alternative therapies for cancer. *Oncologist*. 2004;8:80-89.
11. Kremser T, Evans A, Moore A, et al. Use of complementary therapies by Australian women with breast cancer. *Breast J*. 2008;17:387-394.
12. Baum M, Ernst E, Lejeune S, Horneber M. Role of complementary and alternative medicine in the care of patients with breast cancer: report of the European Society of Mastology (EUSOMA) Workshop, Florence, Italy, December 2004. *Eur J Cancer*. 2006;42:1702-1710.
13. Chang CJ, Chiu JH, Tseng LM, et al. Modulation of HER2 expression by ferulic acid on human breast cancer MCF7 cells. *Eur J Clin Invest*. 2006;36:588-596.
14. Gu G, Barone I, Gelsomino L, et al. *Oldenlandia diffusa* extracts exert antiproliferative and apoptotic effects on human breast cancer cells through ERα/Sp1-mediated p53 activation. *J Cell Physiol*. 2012;227:3363-3372.
15. Chang R. Bioactive polysaccharides from traditional Chinese medicine herbs as anticancer adjuvants. *J Altern Complement Med*. 2002;8:559-565.
16. Vickers A. Botanical medicines for the treatment of cancer: rationale, overview of current data, and methodological considerations for phase I and II trials. *Cancer Invest*. 2002;20:1069-1079.
17. Barolet R, Bensky D. *Chinese Herbal Medicine Formulations and Strategies*. Seattle, WA: Eastland Press; 1990.
18. Liu M-L, Chien L-Y, Tai C-J, Lin K-C, Tai C-J. Effectiveness of traditional Chinese medicine for liver protection and chemotherapy completion among cancer patients. *Evid Based Complement Alternat Med*. 2011;2011:291843.
19. Nose M, Terawaki K, Ogihara Y. The role of a crude polysaccharide fraction in the macrophage activation by "Shosaikoto". *Phytomedicine*. 1997;4:23-26.
20. Hiroshima Y, Bando M, Kataoka M, et al. Shosaikoto increases calprotectin expression in human oral epithelial cells. *J Periodontol Res*. 2010;45:79-86.
21. Yonekura K, Kawakita T, Mitsuyama M, et al. Induction of colony-stimulating factor(s) after administration of a traditional Chinese medicine, Xiao-Chai-Hu-Tang (Japanese name: Shosaiko-to). *Immunopharmacol Immunotoxicol*. 1990;12:647-667.
22. Crew KD, Capodice JL, Greenlee H, et al. Pilot study of acupuncture for the treatment of joint symptoms related to adjuvant aromatase inhibitor therapy in postmenopausal breast cancer patients. *J Cancer Surviv*. 2007;1:283-291.
23. Walker EM, Rodriguez AI, Kohn B, et al. Acupuncture versus venlafaxine for the management of vasomotor symptoms in patients with hormone receptor-positive breast cancer: a randomized controlled trial. *J Clin Oncol*. 2010;28:634-640.
24. Deng G, Vickers A, Yeung S, et al. Randomized, controlled trial of acupuncture for the treatment of hot flashes in breast cancer patients. *J Clin Oncol*. 2007;25:5584-5590.
25. Mao JJ, Farrar JT, Bruner D, et al. Electroacupuncture for fatigue, sleep, and psychological distress in breast cancer patients with aromatase inhibitor-related arthralgia: a randomized trial. *Cancer*. 2014;120:3744-3751.
26. Paterson C, Britten N. The patient's experience of holistic care: insights from acupuncture research. *Chronic Illn*. 2008;4:264-277.
27. Kaptchuk T. *The Web That Has No Weaver*. Chicago, IL: Cogden & Weed; 1983.
28. Gould A, McPherson H. Patient perspectives on outcomes after treatment with acupuncture. *J Altern Complement Med*. 2001;7:261-268.
29. Parekh HS, Liu G, Wei MQ. A new dawn for the use of traditional Chinese medicine in cancer therapy. *Mol Cancer*. 2009;8:21.