

# The Effectiveness of Support Groups in Asian Breast Cancer Patients: An Integrative Review

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## ABSTRACT

Cancer support group has been studied as an intervention to improve patient psychosocial well-being. The effectiveness of support groups among Asian breast cancer (BC) patients has been unclear and received limited attention to the evidence of its effectiveness. The social-cognitive processing theory underlies the principles of support groups and advocates that a positive, supportive social environment can improve cognitive processing. The purpose of this paper is to present an integrative review of research evidence on the effectiveness of cancer support groups with Asian BC patients. Empirical studies related to support group among Asian and Asian American BC patients published between 1982 and April 2014 are reviewed. There are 15 studies selected (12 from the Asian-Pacific region and 3 from Western countries). The review includes 1 qualitative study, 3 descriptive studies, 1 mixed method design, and 10 experimental or quasi-

experimental studies. The support group intervention activities include psycho-educational program such as health education, problem-solving, and stress management. These studies support the effectiveness of support group in alleviating psychological distress and supporting quality of life of Asian BC women. Overall, there is limited research on the use and effectiveness of support groups with Asians cancer patients in Asia and in Western countries. Without accounting for Asian immigrants overseas, the Asian population is expected to grow from 4.3 to 5.3 billion by 2050. As cancer patients become more diverse due to global emigration, more rigorous studies examining the effectiveness of psychosocial intervention among transcultural cancer patients are needed.

**Key words:** Support group, Asians with cancer, review

## Introduction

Breast cancer (BC) survivors are the most prevalent cancer survivors with 4.4 million survivors living up to 5 years postdiagnosis.<sup>[1]</sup> Due to improvements in early detection

and treatment, the population of BC patient is expected to increase, and research has focused on BC patients' experience and needs. The need for psychosocial support

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among cancer patients is well-established in Western countries. Numerous studies have reported on the emotional distress experienced by BC patients. BC patients reported experiencing high levels of psychological distress and depression, particularly after diagnosis and treatment, and need psychosocial support.<sup>[2-6]</sup> One study found that 41% of recently diagnosed BC patients experience high levels of distress and 11% had clinically significant levels of depression.<sup>[4]</sup> As a result, numerous studies have explored the role of cancer groups in improving cancer patients' well-being.

The social-cognitive processing theory (SCPT) is consistent with the use of cancer support groups. This theory explicates how the social context influences emotional adjustment to cancer. It advocates that a positive and supportive social environment improves cognitive processing by allowing cancer patients to reflect and discuss thoughts and feelings caused by cancer.<sup>[7,8]</sup> A cancer support group can provide an exchange of social and emotional support and educational information for cancer patients in a comfortable social environment; thus, it helps patients to cope with cancer by adjusting their attitudes, knowledge, and expectation about the disease.<sup>[9-15]</sup> According to SCPT, two critical processes lead to optimal health and adjustment following a stressful event:

1. Emotional expression
2. Social support (SS)

Both of these processes are inherent to most support groups. The majority of support group interventions studies were conducted in Western countries and used Caucasian and/or African American cancer participants. Due to communication style and culture differences, it is questionable whether the Western intervention of cancer support group is applicable and effective with Asians BC patients. Early cross-cultural research suggested that the common communication style for Asian Americans was an indirect mode with minimal expression of emotion.<sup>[16,17]</sup> Asians are reported as less likely to express their emotions freely in public. Seeking help for emotional support outside of the immediate family is commonly perceived by family and others as inadequate family training and can result in loss of face for one's family.<sup>[18]</sup> Additionally, the Asian culture promotes homogeneity among its members and perceives deviants as shameful and embarrassing. In fear of being stigmatized by their illness, most Asians refrain from openly discussing their sickness with others.<sup>[19]</sup>

Globally, the implementation of both clinical and lay cancer support groups is increasing. Yet, it is unclear if a support group intervention is effective for Asian BC patients. The purpose of this paper is to review research on cancer support group interventions among Asians BC patients and to examine whether groups consistent with SCPT is a cultural fit with them.

## Methods

A literature search for research studies related to emotion expression and receipt of emotional support in a social-cognitive supportive group environment among Asians. According to the US Census, "Asian" is defined as an individual with origins from the Far East, South-East Asia, or the Indian Subcontinent.<sup>[20]</sup> The computerized databases MEDLINE, the Cumulative Index to Nursing and Allied Health Literature, and PsycINFO were searched for research studies written in English from 1982 to April 2014 that addressed support groups among Asian populations. The key words used in the search were: "Psychosocial support," "emotional expression," "support groups," "health," "BC," and "Asians." The reference lists from these studies were also carefully reviewed. Articles that did not involve:

1. Asians
2. Cancer support group interventions
3. Discussion sessions
4. Quantitative or qualitative psychosocial evaluation of the intervention were excluded from the review

## Results

Of the 27 studies identified and reviewed by all authors, 12 were excluded because they did not meet inclusion criteria. A total of 15 articles related to group interventions for Asian cancer patients were identified. Most of the studies were reported a decade ago 73% and used female subjects only 60%. Three studies used male subjects in addition to female subjects<sup>[3,15,21]</sup> and 3 studies did not disclose the gender of their subjects.<sup>[19,22-24]</sup> One dissertation study<sup>[25]</sup> was included in this review. All types of studies were included; study designs included 1 qualitative studies,<sup>[19]</sup> 3 descriptive studies,<sup>[21,26,27]</sup> 1 mixed qualitative and quantitative design,<sup>[28]</sup> and 10 random-control trial or quasi-experimental studies.<sup>[3,22-25,27,29-32]</sup> Twelve out of 15 studies were from Asian Countries. Two were from Hong Kong,<sup>[19,20]</sup> 1 from China,<sup>[3]</sup> 1 from Malaysia,<sup>[33]</sup> 1 from Indonesia,<sup>[25]</sup> and the majority ( $n = 7$ ) was focused on Japanese BC patients in Japan.<sup>[23,24,27,30-32]</sup> Only 3 articles about cancer-related support groups were conducted in Western countries; 2 studies originated from United States,<sup>[21,26]</sup> and 1 was from Australia<sup>[28]</sup> [Table 1].

### Support groups among breast cancer patients in Japan

A pilot study<sup>[31]</sup> was one of the first studies conducted in Japan to compare group support counseling with individual counseling among 20 Japanese BC women with a random assignment study design. Both individual and group supportive interventions were based on a series of once a week, five 1-h sessions, which included

Table 1: Summary of cancer support group studies in Asian cancer patients

| Reference and country       | Study design and sample (n) declined/dropout rate                                                                                                                                                                          | Cancer type/ethnicity/gender            | Intervention/duration                                                                                                                                                           | Measures                                                                                                                                                                    | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Limitation                                                                                                                                                                                                                         |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Japan, 1996 <sup>[21]</sup> | RCT: Pilot study with pre- and post-test Total: 20 → 17 Individual intervention: 9 Group intervention: 80% and 15%                                                                                                         | 100% BC Japanese women                  | Program includes psycho-education, problem solving, psychological support, relaxation training, and guided imagery<br>Once weekly, 1 h sessions over 5 weeks                    | POMS<br>DWI                                                                                                                                                                 | The group intervention was as effective as individual therapy<br>Overall, intervention was effective in decreasing negative emotions, particularly depression, fatigue, tension-anxiety, and TMDs. However, it did not change coping styles<br>Subjects receiving individual intervention were also interested in the group session<br>Subjects in the group intervention were hesitant to talk in the earlier sessions                                                                                                                                                                                                                                                                 | Improved psychological distress due to expression of anticipation and fear<br>Less effective in changing coping styles b/c Program did not focus on it<br>Culture difference of "coping"<br>Coping is learned throughout life<br>Changes in coping style is greatest in longer follow-up<br>People in individual intervention wanted to share experience. People in group intervention felt satisfied with communication, comfortable to criticize doctor, hesitant to talk at first, and wanted to talk individually about private matters                                                                                                                                                                                                                                                                                                                                                                                                                   | No CG. Should follow longer for long term effect and collect patient's impressions                                                                                                                                                 |
| Japan, 2000 <sup>[22]</sup> | QE: Single group pre- and post-test Total: 57 → 40 NR% and 34%                                                                                                                                                             | 100% BC Japanese women                  | Program includes: Psycho-education, problem-solving, psychological support, relaxation training, and guided imagery<br>Five 90 min sessions over an unspecified period of time  | POMS                                                                                                                                                                        | Overall, structure group intervention was effective in decreasing negative emotions, particularly depression, lack-of-vigor, tension-anxiety, confusion, and TMDs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Short-term emotional discomfort alleviation due to patients speaking about their sufferings, their mutual understanding of their problems, and mutual psychological support<br>Intervention was shown to be meaningful for the cancer patient in supplying a SS/network                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No CG                                                                                                                                                                                                                              |
| Japan, 2000 <sup>[24]</sup> | QE: Single group pre-, post-intervention, and 6 months after intervention test Total: 57 → 47 NR% and 18%                                                                                                                  | 100% BC Japanese gender NR              | Program includes: Psycho-education, problem-solving, psychological support, relaxation training, and guided imagery<br>Once weekly, 90 min sessions over 5 weeks period of time | POMS                                                                                                                                                                        | Effectiveness of a structured group intervention program persistent for 6 months for patients who had no psychiatric diagnoses at entry<br>Additional intervention was needed for patients with psychiatric diagnosis at entry                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Intervention has long term effects<br>Effect due to patients' verbalization and mutual understanding of their suffering problems, and also by offering mutual support<br>Intervention was shown to be meaningful for the cancer patient in supplying a SS/network<br>Not for those with adjustment disorders at entry. Need other intervention in addition (individual psychotherapy)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No CG                                                                                                                                                                                                                              |
| Japan, 2000 <sup>[25]</sup> | QE: Two phases 1 <sup>st</sup> phase: Pilot Western intervention model 2 <sup>nd</sup> phase: Evaluate revised intervention 1 <sup>st</sup> phase Total: 10 → 7 74% and 30% 2 <sup>nd</sup> phase Total: 44 → 44 0% and 0% | Both phases used 100% BC Japanese women | Fawzy and Fawzy (1994) intervention includes health education, coping-skills training, stress management, and psychosocial support<br>Once weekly, 1.5-h sessions for 6 weeks   | 1 <sup>st</sup> phase: Survey response to the intervention<br>2 <sup>nd</sup> phase: Survey response to the intervention and satisfaction measured with Visual Analog Scale | 1 <sup>st</sup> phase: Patients (60%) reported intervention including statistical medical information was inappropriate<br>Majority of patients (70%) avoided discussion of sexual matters and time to relax in beginning of group. Also, 50% of patients receives support from sister or daughter<br>Patient (60%-80%) desired more information on stress and coping methods (i.e., relaxation technique) and a discussion of own experience<br>2 <sup>nd</sup> phase: All reported satisfaction with revised model<br>Patients could share experience (71%), change thinking/behavior to a more positive perspective (57%), and reduce stress from learned relaxation technique (39%) | Psychosocial group intervention is applicable for Japanese BC patients when the model accounts for cultural differences<br>Areas requiring significant change were the provision of medical information (dropped out sexuality session and statistical medical prognosis and included coping information) and communication style (refocused main sources of support from husband to female family members as the)<br>Patients report sex same family member as main support because the core Asian family relationship is "parent-child"<br>Asian patients avoidance of sexual information may be due to value of role fulfillment, such as mother and house manage, rather than physical images for femininity and beauty. Therefore, study refocused topic on body image<br>Medical information was provided by question and answer because disclosure of information to patients who do not want to be told the truth can cause serious harm (Asia, 1995) | Did not test the efficacy of intervention by using valid and reliable outcome measures, but relied on dropout rate and self-report of satisfaction<br>Sample size is small<br>Can only generalized to population similar to sample |

(Continued)

Table 1: (Continued)

| Reference and country       | Study design and sample (n) declined/ dropout rate                                          | Cancer type/ ethnicity/ gender | Intervention/duration                                                                                                                                                                                                                              | Measures                                                                                                                                                | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Limitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|---------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Japan, 2000 <sup>[20]</sup> | RCT: Baseline, 6 weeks, and 6 months test<br>Total: 50→46<br>EG: 23<br>CG: 23<br>65% and 8% | 100% BC Japanese women         | The modified Fawzy and Fawzy (1994) intervention model from earlier study; it consisted of four components<br>Health education<br>Coping skills training<br>Stress management; and psychosocial support<br>Once weekly, 1.5-h sessions for 6 weeks | POMS<br>MAC<br>HAD                                                                                                                                      | The EG had significantly lower scores than the controls for TMD and significantly higher scores for vigor on the POMS, and significantly higher scores for fighting spirit on the MAC at the end of the 6-week intervention. These improvements were sustained over 6 months of follow-up<br>Group members sustained support to each other even outside of study. They report that the support had been very helpful because it enabled them to talk to each other freely about various related issues                                                                                                                        | Participants in the intervention group sustained the beneficial coping style fighting spirit. This was attributed to the fact that they were able to adapt positive coping methods (i.e. relaxation) and utilize it long term (60%-87%) due to:<br>Cultural attitude to not seek professional assistance for psychosocial problems related to cancer experience<br>Repress emotions<br>Age of subject and lack of child care<br>Difficulty in access site                                                                                                                                                                                                                                                                                                                                                                                               | Small sample size in the current study<br>The generalizability of our findings is uncertain<br>There was a significant difference in age between the subjects who participated and those who did not<br>The intervention in this study included four components. The effectiveness of each component would only be clarified by additional studies<br>Participants were informed that intervention might benefit them, and that information and their expectation alone may have affected the results |
| Japan, 2001 <sup>[21]</sup> | Descriptive<br>Total: 126→52<br>Participants: 52<br>Nonparticipants: 73<br>16% and 58%      | 100% BC Japanese women         | The modified Fawzy and Fawzy (1994) intervention model from earlier study; it consisted of four components<br>Health education<br>Coping skills training<br>Stress management and psychosocial support<br>Once weekly, 1.5-h sessions for 6 weeks  | Questionnaire asking patient's intention to join. If no, the next question is whether they are interested in joining and reason for not joining<br>HADS | Of 126, only 52 (42%) participated in study<br>Participation was greater among those with a higher level of anxiety measured by the HADS, those who had undergone surgery within the last 12 months, and those who were 50-65 years old<br>Among the nonparticipants, 20 (27%) were not interested in the intervention. Nonparticipants without any interest had significantly higher anxiety levels than those nonparticipants with interest (almost as high as the participated subjects)<br>Disinterested nonparticipants had a significantly higher number of psychological reasons than those interested nonparticipants | Lower participation rate (42%) than Western world 60%-87%, due to:<br>A prescriptive approach for recruitment<br>Intervention was offered in the context of a randomized trial<br>Cultural value of repressed emotions<br>Discussing personal problems bring a deep sense of shame<br>Participants who had anxiety and had undergone surgery within the last 12 months were significantly more likely to participate. Future psychosocial group intervention should seek out these participants<br>50-65 years old were more likely to participate in the intervention compared to those 49 years or less because<br>Those over 65 years of age were excluded<br>Young people have social barriers such as having children or going to work<br>Recommend offering disinterested nonparticipants support such as medication and individual psychotherapy | Not a representative sample of the BC population in terms of age, disease stage and time since surgery. Participants differ from each other significantly in disease stages<br>Rate of participation in the intervention was low<br>Didn't consider religion/spiritual factors. Difficult to classify the Japanese religion because they tend to practice a mixture of Shinto and Buddhism                                                                                                            |

(Continued)

Table 1: (Continued)

| Reference and country                 | Study design sample (n) declined/ dropout rate                                                                                                                                                                                                                                                                                                           | Cancer type/ ethnicity/ gender                                                                  | Intervention/duration                                                                                                                                                                                                                                                                                                  | Measures                                                                  | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                | Limitation                                                                                                                                                                                                                                                                                                                                        |
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| Japan, 2001 <sup>[23]</sup>           | QE: Single group pre-, post-, at the end of the 3 <sup>rd</sup> additional meeting, and 6 months after intervention<br>Data analysis of patients with nodal metastases and/or adjustment disorders<br>Total: 50→34<br>Lymph node metastases: 20<br>No lymph node metastases: 14<br>Adjustment disorders: 27<br>No adjustment disorders: 7<br>NR% and 32% | 100% BC Japanese gender NR                                                                      | Program includes: Psycho-education, problem-solving, psychological support, relaxation training, and guided imagery. During the additional sessions, patients were encourage to talk without specific agenda<br>First, 5 once weekly meetings. Then, 3 additional group meeting every 2 months. Each session is 90 min | POMS                                                                      | For all patients, there were significant decrease in before and after intervention scores for negative emotions (depression, lack-of-vigor, tension-anxiety, and TMDs)<br>There were significant differences between patients with/without metastases during each period, that is, patients with lymph node metastases had higher TMD scores than patients without metastasis<br>Similarly, patients with a psychiatric diagnosis had much higher TMD scores all through the period than patients without psychiatric diagnosis                                                                                                                                                                                 | Intervention has prolong effects on emotions of those with metastases and/or adjustment disorders                                                                                                                                                                                                                                                                                                                                         | In the present study, while no patients required further support after completion of the new program, further individual/group psychotherapy could be requested<br>This type of intervention program may be applicable to patients with other physical diseases and advanced stages of cancer, as well as to caregivers of dementia victims, etc. |
| Hong Kong, China, 2000 <sup>[9]</sup> | Qualitative<br>Total: 12<br>20% and 0%<br>NR% and 32%                                                                                                                                                                                                                                                                                                    | 25% colon cancer<br>42% BC<br>33% naso-pharyngeal cancer<br>Chinese male (44%) and female (66%) | Recruited participants participating in self-help groups outside of study. Self-help groups emphasize individual growth and mutual aid                                                                                                                                                                                 | Semi-structured in-depth individual interviews of self-help group members | All participants felt connected with another group member through their mutual experience; it allowed them to openly share their difficulties without feeling embarrassed<br>A majority (83%) of the participants reported a more positive outlook after seeing other cancer survivors; it gave them hope and confidence<br>66% of the participants stated that they felt useful helping another group member<br>83% of them felt they improved self-care from gained knowledge regarding treatment, diet, and health care and social benefit systems<br>The reported negative experience associated with joining the self-help group is feeling sad when conditions of a close group member deteriorates (25%) | Participation in self-help groups empower participants through role-modeling. New participants get inspired by old members and learn how to help themselves from shared experiences of old members<br>Self-help group members changed their outlook concerning the illness experience. Self-help groups, which provide an important context for empowering patients with cancer in the West, also can assist Chinese patients with cancer | NR                                                                                                                                                                                                                                                                                                                                                |

(Continued)

Table 1: (Continued)

| Reference country                     | Study design and sample (n) declined/ dropout rate                                                                                                                                                                     | Cancer type/ ethnicity/ gender                                                                                            | Intervention/duration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Measures                                                                                                                                                                                                                            | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Limitation                                                                                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hong Kong, China, 2006 <sup>[2]</sup> | RCT: Two phase pre-4 <sup>th</sup> month and 8 <sup>th</sup> month follow-up period tests<br>Pilot phase<br>Total: 20→16<br>NR% and 20%<br>RCT<br>Total: 87→76<br>BMS: 27<br>SE: 16<br>SS: 16<br>CG: 17<br>80% and 13% | 100% BC Chinese gender NR                                                                                                 | The BMS model focuses on: Normalizing experience, acceptance, forgiveness, self-love, using SS, and commitment to help others<br>Five 3 h weekly sessions (15 h in total)<br>SE therapy group focuses on: SS, emotion expression, dealing with fears, life prioritization, and improved relationships, communications, and symptom control<br>Weekly for 2 h for 8 weeks<br>The SS self-help group has no structure<br>3 h each week for 5 weeks<br>SS self=Help group. Nonstructured.<br>Participants decide on topic<br>5 weeks for 3 h each weeks | Salivary cortisol as the physiological stress marker<br>GHQ<br>Perceived Stress Scale<br>Mini MAC Scale<br>The Courtauld Emotional Control Scale<br>Yale SS index                                                                   | Pilot: Salivary cortisol levels at 4 and 8 months compared to baseline increased hope, sense of self-worth, and relaxation<br>RCT: BMS group produced the greatest and positive SS, reduced psychological distress, emotional control, and negative mental adjustment<br>Most participants in SE group indicated the treatment was helpful, but changes in total salivary cortisol were not statistically significant<br>No benefit in the SS group. Group may have adverse effect on negative emotions in members after 4-8 months<br>Active professional intervention was more likely to yield positive outcomes, esp. interventions that focus on spiritual dimensions | Pilot: Reduce GHQ<br>RCT: BMS intervention: Reduce psych distress, emotional control, negative emotional, while increase SS. Salivary level reduced. dt integrated approach<br>SE: Helped subjects in several areas, talk, self-hypnosis<br>SS: Group may have adverse effect on negative emotions in members after 4-8 months. It exposes patients to negative feelings they aren't ready to work on it. Peer support groups with cancer or chronic illness patients may not be effective<br>CG: Participants decreased SS network and quality of SS. BC patients commonly report feeling loneliness | Small population size<br>Uneven distribution of sample<br>Incomplete randomization<br>Self-selection to participate                                                                                                 |
| China, 2013 <sup>[3]</sup>            | RCT: Pre-RT tx versus 2 weeks after RT tx tests. Post 2 years follow-up<br>NR% and 4%<br>Total: 187→178<br>EG: 89<br>CG: 89                                                                                            | 35% nasopharyngeal<br>23% breast<br>17% gynecological<br>7% lung<br>30% other cancer<br>Chinese men (42%) and women (58%) | Both EG and CG received RT. The EG group also received interventions between pre-RT and 2 weeks after RT<br>Interventions depended on meeting problems and psychological issues. It includes: psycho-education, cognitive behavioral therapy, and SE therapy<br>Twice weekly meetings of 60 min sessions over a total of 8-12 h                                                                                                                                                                                                                      | Pre-RT tx versus 2 weeks after RT tx<br>Self-Rating Anxiety Scale<br>Zung Depression Scale<br>European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30<br>Post 2 years follow-up: OS<br>DFS | Pre-RT tx versus 2 weeks after RT tx<br>Post-Rx tx, CG had more anxiety and depression and lower QOL than intervention group<br>Post-Rx tx, intervention significant improved: Symptoms of depression and anxiety and health-related QOL (i.e., better global health status and physical and emotional functioning, and less insomnia) when compared with controls<br>At 2 years follow-up, no improvement in DFS and OS rate in the intervention group compared to the CG                                                                                                                                                                                                | The results of this randomized trial demonstrate that a psychosocial intervention significantly reduced levels of depression and anxiety compared to a CG. Further, the intervention was effective for improving elements of QOL, such as global health status and physical functioning; it also increased emotional functioning. Authors suggest tailoring psychological support plans for cancer patients receiving RT to help them manage any emotional problems                                                                                                                                   | Duration of time of survey for anxiety, depression, and QOL was short and unable to determine what changes of moods and QOL<br>Survival following RT is short<br>Use single center design and sample size was small |

(Continued)

Table 1: (Continued)

| Reference and country           | Study design and sample (n declined/ dropout rate)                                                                                | Cancer type/ ethnicity/ gender                                                                                                                                    | Intervention/duration                                                                                                                                                                                | Measures                                                                                                                              | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Limitation                                                                                                                                                                                                                                                                                         |
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| Indonesian, 1998 <sup>251</sup> | QE: pre- and post-test<br>Total: 133<br>EG: 87<br>Morning: 43<br>Evening: 44<br>CG: 46<br>Morning: 20<br>Evening: 26<br>NR and 0% | 100% BC<br>Indonesian women                                                                                                                                       | Program includes information related to BC and its TX, problem-solving methods, and stress reduction methods. Semi-formal structure with active discussions<br>Once weekly, 2 h sessions for 6 weeks | Body Image Scale<br>Personal Assessment Of Intimacy In A Relationship Inventory<br>The Self-efficacy Scale                            | Women in a support group did experienced more positive responses in terms of body image, intimacy, and self-efficacy than women in the CG<br>Findings from field notes indicated women found participation in the support group to improve their self-confidence, coping (by using learned disease information and coping methods), and communication with husbands and other family members about                                                                                                                                                                                                                                                                                                                                                                                                                                 | Majority of participants have RT and chemotherapy, which changed their breasts appearance. The breast appearance may be further complicated by lymphedema and affected participant's psychological status<br>Measures may not be culturally sensitive. Most (75%) of participants were Islamic and Islamic culture promotes acceptance of things that happen to them. However, Chi-square test did not support influence of religion on BIS items<br>Recommendations: Longitudinal study with multiple measures                                                                                                                                         | Generalizability limited to hospitals where sample was collected from (West and Central Jakarta)<br>Purposive sampling with nonrandom group assignments<br>Measures may not be culturally sensitive<br>Time frame for support group activity is limited<br>Stages of disease and TX not controlled |
| Malaysia, 2013 <sup>261</sup>   | QE: Single group pre- and post-test<br>Total: 34<br>NR%                                                                           | 100% BC<br>Malaysian women                                                                                                                                        | Psycho-education intervention with: presentation of medical information and discussion of cancer causes, prognosis, and treatment strategies                                                         | 1998 versions of: The WHO-5 well-being Index or The Malay version of WHO-5 well-being Index for the non-English speaking participants | Group psycho-education played a significant role in improving the well-being status and reducing depression of BC survivors as analyzed by the WHO-5 well-being index<br>The proportion of individuals with negative well-being had reduced from 9 (26.5%) to 1 (2.9%) after the psychological intervention<br>Majority of the participants had overcome depression and was found to be normal after the psycho-education 33 (97.1%)                                                                                                                                                                                                                                                                                                                                                                                               | Biological factors that affect patient's well-being include the severity of the disease, treatment received, and the side effects related to the treatment<br>Depression is associated with those receiving radiotherapy treatment (induces fatigue and nausea), pain, surgery, and low self-esteem<br>In BC women may be due to changes in body image, limited functional status during treatment, and poor body image brought on by surgery. Since QOL is affected by depression, all the factors mentioned above also influences QOL<br>Other studies have found psycho-education to enhance well-being and absence of depression <sup>19, 341</sup> | Generalizability limited to those with nonmetastatic BC, taking allopathic medication, and from similar geographic area as Melaka, Malaysia                                                                                                                                                        |
| Hawaii, 2002 <sup>211</sup>     | Descriptive: Interview based on questionnaire<br>Total: 194<br>NR%                                                                | 34% BC<br>26% prostate<br>10% uterus<br>30% other<br>35% Caucasian<br>30% Filipino<br>18% Native Hawaiian<br>17% Japanese Ancestry<br>Male (45%) and female (55%) | Support groups of outside source<br>Frequency and duration of support group attendance is NR<br>It is a group where participants discuss disease and related issues                                  | Interview                                                                                                                             | Most patients (91%) reported that they received information about the cancer diagnosis and treatment, but only 38% of participants received info about support group<br>84% reported experiencing cancer-related stress: Women and younger patients reported more stress<br>Only 7% (n= 11) had attended cancer support groups, but many were interested (49%)<br>Of those who attended the cancer support group: 5 stated it helped them "very much;" 2 stated it had helped them "quite a bit;" and 4 reported it had helped them "a little" or "not at all."<br>Contrary to the investigators' expectations, both Japanese and Filipino American patients (64%) believed that a support group would have helped them, while only 38% of Hawaiians and 32% of European Americans responded that a support group would be helpful | As other studies did, newly diagnosed cancer patients report experiencing stress<br>Also, younger age and female gender experiencing more stress is consistent with other studies<br>Lack of knowledge about support group resources may explain their low attendance rates                                                                                                                                                                                                                                                                                                                                                                             | Small sample size<br>Influenced by response rate bias.<br>Not generalizable to those terminally ill<br>B/c respondents were long-term residents of Hawaii. Data might not be applicable to immigrants                                                                                              |

(Continued)

Table 1: (Continued)

| Reference and country              | Study design and sample (n declined)/ dropout rate                                                                                                                                                                                | Cancer type/ ethnicity/ gender                                                                         | Intervention/duration                                                                                                                                                                                                                    | Measures                                                                                                             | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Discussion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Limitation                                                                                                                                                                                                              |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| United States, 2003 <sup>26)</sup> | Descriptive<br>Total: 22<br>NR%                                                                                                                                                                                                   | Most commonly breast, lung, nasopharyngeal, colorectal, and cervical cancer survivors of Chinese women | The Chinese women's cancer support group: 1 h of education on some aspects of cancer then 1 h of discussion<br>Ongoing support group that meets on the first and third Saturday every month                                              | Survey evaluation of the program at end of 2002                                                                      | Participants report program helped them with coping with cancer by feeling more supported, less isolated, more hopeful, more knowledgeable about resources, and were now able to help others (17/18). A majority (18/22) stated that they had applied skills they learned (i.e. Tai Chi, meditation, communication, coping with stress, centering, anger management, sharing, etc.) to their lives<br>They were better able to express their feelings and handle stress (16/18), and felt understood by other members (17/18)<br>It also improved their outlook by increasing their courage, will power, and acceptance (20/22) and family relationship (15/22). Others complained that the meetings were too few<br>Started children's support group for children age 4-14, who came with their mother to the support groups | The program meets emotional needs of Chinese women coping with trauma of cancer<br>Factors of program that made it successful<br>Provided a safe and comfortable environment where monolingual Chinese can share needs, concerns, hopes, and fears without judgment<br>Bicultural and bilingual facilitators<br>Trust and support from other members and facilitators<br>Collaboration with community partners                                                                                                                                                                                                                                                                                                                                                                                                                 | NR                                                                                                                                                                                                                      |
| Australia, 2011 <sup>31)</sup>     | Mixed qualitative and quantitative design: two phase (formative and pilot modified program)<br>1 <sup>st</sup> formative phase<br>Total: 23<br>NR%<br>2 <sup>nd</sup> pilot modified program phase<br>Total: 29→24<br>NR% and 18% | 100% BC Chinese-Australian women                                                                       | Program involved 1 h of information sharing from interdisciplinary team regarding BC and remission prevention and 1 h of group sharing. It was delivered in Cantonese and used culturally relevant examples<br>2 h sessions over 8 weeks | Evaluation form and semi-structured discussion with all participants to identify usefulness and relevance of program | 100% are grateful for a cancer support group that was presented in their language and had relevant cultural information<br>Patients reported that program helped them connect with others with the same language, who are in similar situations. It made them more inclined to express their emotions and concerns and reduced their sense of isolation<br>They strongly agree or agree that the program improved their understanding of BC management (97.5%), increased their confidence in ability to cope (100%), provided opportunities to share their questions or anxiety (95.8%), and suited their needs (100%)                                                                                                                                                                                                       | Design of cancer support group programs must be congruent with the cultural references of the member's needs<br>Program effectiveness indicated by high attendance rate (70% of the participants missed only one session and in these cases) b/c<br>It should include culturally sensitive information<br>Majority of the participants were newly diagnosed (x < 5 years) thus their needs were primarily informational rather than support-oriented<br>Surrounded by people of common experience, culture, and language promotes expression of feelings and counteracts the tendency of Chinese people, which is seen as a sign of weakness and disruptive of social harmony<br>Recommendation future research on long-term survivors' need...male vs. female support groups, and professional led versus cancer led programs | Convenience sample from metropolitan city in Sydney<br>Some Chinese-Australian women were likely to be underrepresented (non-Cantonese speakers or those who lived in rural areas)<br>May not be generalizable to males |

BC: Breast cancer, RCT: Randomized controlled trial, POMS: Profile of Mood States, MAC: Mental Adjustment to Cancer, HADS: Hospital Anxiety and Depression Scale, NR: Not reported, PI: Pacific Islander, BMS: Body-mind-spirit, SE: Supportive-expressive, SS: Social support, GHQ: General Health Questionnaire, OS: Overall survival, DFS: Disease-free survival, DWI: Dealing with illness, QE: Quasi-experimental, EG: Experimental group, CG: Control group, TMD: Total mood disturbance, RT: Radiation therapy



psycho-education, problem-solving, psychological support, relaxation training, and guided imagery (SCPT concepts). The study results concluded that the intervention was not effective in changing coping styles. While, there were significant decreases in the reports of depression, fatigue, anxiety, and mood disturbances. The results indicated that both interventions were positively effective in decreasing psychological distress. Despite the hesitation to talk to each other in earlier sessions, the author was surprised to find that all women were able to discuss their disease directly using words, which are often considered culturally “taboo” such as “BC” and “metastasis.” In addition, participants that received the individual therapy expressed interest in the group support intervention method; however, the reverse was not true.

Following the pilot study,<sup>[31]</sup> the research team<sup>[23,24,32]</sup> published a series of articles from studying the effects of a structured psychiatric group intervention on 57 Japanese BC patients’ emotions. The study demonstrated the effectiveness of the intervention in alleviating some psychological distress.<sup>[32]</sup> When evaluating its effectiveness after 6 months, the investigators found individual differences for maintaining positive adjustment. Patients with lymph node metastasis and/or those with a psychiatric diagnosis at entry did not show persistent effects in psychological adjustment.<sup>[24]</sup> After adding 3 more group meetings, the intervention then showed effectiveness in patients with lymph node metastasis and/or with adjustment disorders.<sup>[23]</sup> Based on findings, the authors recommended that a structured psychiatric group intervention as theorized by SCPT has prolonged effects in decreasing psychological distress, even with patients with metastases and/or adjustment disorders.

In another series of studies from Japan,<sup>[27,29,30]</sup> the cultural applicability of a structured psychosocial group intervention among Japanese women with BC was examined in a randomized clinical trial. The group intervention involved a series of six 1.5-h sessions that included health education, coping-skills training, relaxation training, and psychological support was provided to participants (SCPT). The study participants reported three aspects of the Western-based group intervention were inappropriate and required significant changes that were, the discussion of sexuality, provision of medical statistical information, and communication sessions with husband and doctors. The authors concluded that it might be too distressing to face the news and that women were concerned that hearing the information might diminish their hope and desire to fight their cancer.<sup>[29]</sup> On the other hand, most participants desired more psychological information (i.e., information on stress and how to cope) and wanted to discuss their own cancer experiences. Regarding family support, female family members, and friends were the main sources of support for Japanese women diagnosed with cancer, not their

husbands. The authors further modified the intervention model and received positive responses from the participants. The authors suggested that psychosocial group support intervention was relevant for Japanese women diagnosed with BC when the model was adapted in the consideration for cultural differences.

In the consequent randomized controlled trial (RCT) study,<sup>[30]</sup> a 6-week structured, psychosocial group intervention; participants were assessed in 46 Japanese women with BC. The experimental group had significantly lower scores than the control group (CG) for total mood disturbance and significantly higher scores for vigor on the Profile of Mood States and for fighting spirit on the Mental Adjustment to Cancer scale. These positive results continue at the 6-month follow-up. The reasons of refusal to participate in the support group included work, childcare, and geographic distance.<sup>[27]</sup> It was also found that those who wished to participate were significantly older, with a high level of anxiety, and had surgery within the last 12 months. On the other hand, nonparticipants without any interest had significantly higher anxiety levels than those with interest but unable to participate. The authors suggested that other support such as medication or individual psychotherapy might be needed to help alleviate the psychological distress among those that expressed no interest in support groups.

### *Support groups among Chinese cancer patients in Hong Kong and China*

A qualitative study<sup>[19]</sup> explored the benefits of SCPT self-help peer-facilitated cancer groups from the perspective of 12 Hong Kong Chinese patients with cancer. The reported benefits included feeling connected by mutual cancer experience and being able to share openly about their difficulties. Most participants also reported improved self-care, a sense of empowerment, role modeling and positive outlook. The reported negative experience is the sad feeling when the condition of a close group member deteriorates.

Another randomized trial study conducted in Hong Kong<sup>[22]</sup> examined the psycho-physiological outcomes of different psychosocial group interventions for 87 BC patients in Hong Kong. Participants were randomly assigned to a no-intervention CG or three intervention groups: Body-mind-spirit (BMS) (a culturally-sensitive approach), supportive-expressive (SE) (a Western-style intervention approach), or a SS self-help group. The intervention course was over 5-8 weeks depending on support group. Psychiatric morbidity, distress level, mental adjustment, emotional control, and SS were measured and salivary cortisol was used as the physiological stress marker. The study results indicated that BMS intervention, a culturally-sensitive approach, produced the greatest and the most persistent effects. Most participants in SE groups reported the treatment was helpful, but changes in total salivary cortisol were

not statistically significant from baseline for this group. Participants in SS group had adverse effect on negative emotions in members after 4-8 months. The nonintervention CG reported a decline in SS. The authors suggested that an active professional intervention which address of patient's spiritual needs and is culturally-sensitive is likely to generate therapeutic effects for Chinese BC patients.

Another study was conducted in mainland China<sup>[3]</sup> to evaluate the benefits of a psychosocial interventions among 178 BC and various cancer patients who receive radiation therapy (RT) in a RCT. The intervention includes: Psycho-education, cognitive behavioral therapy, and SE therapy. The levels of anxiety, depression, and quality of life (QOL) were evaluated during the study period and poststudy 2 years follow-up on the overall and disease-free survival (DFS) were also examined. The results showed that the intervention group had significantly improved depression, anxiety, and health-related QOL in the posttreatment stage. However, at 2 years post-follow-up, there was no improvement in the overall and DFS rate in the intervention group compared to the CG. The authors concluded that the psychosocial intervention is effective in reducing levels of anxiety and depression of Chinese cancer patients receiving RT.

### **Support groups among Asian cancer patients in Indonesia and Malaysia**

The effect of participation in a support group on body image, intimacy, and self-efficacy for 87 Indonesian women with BC was explored in a quasi-experimental study.<sup>[25]</sup> The intervention group received the intervention in semi-structured meetings from a female nurse facilitator over the course of 6 weeks. Information related to BC, its treatment, problem-solving, stress reduction strategies were provided to the participants in the intervention group. The findings from this study did not support the hypotheses that Indonesian women with BC who participated in informational support group would experience positive responses on body image, intimacy, and self-efficacy. However, findings from author's field notes indicated that women found participation in the support group can improve their self-confidence, coping (by using learned disease information and coping methods), and communication with husbands and other family members.

A more recent study completed in Malaysia,<sup>[33]</sup> the effectiveness of a group psycho-education on well-being and depression was examined among a convenient sample of 34 Malaysian BC survivors. The group psycho-education included the presentation of medical information and discussion of cancer causes, prognosis, and treatment strategies. The results reflect that group psycho-education played a significant role in improving the well-being status and reducing depression of BC survivors.

### **Support groups among Asian cancer patients in the Western countries**

There are 3 studies conducted in the Western countries that included Asian cancer patients and evaluated the effectiveness of cancer support groups. Through the conduction of interviews,<sup>[21]</sup> the preference for psychosocial support among a diverse sample of 194 newly diagnosed cancer patients were evaluated. The study sample ( $n = 194$ ) consisted of Americans of European descent (35%), Filipino Americans (17%), Native Hawaiians (18%), and Japanese Americans (30%). The cancer sites included breast (34%), prostate (26%), uterus (10%), and other (30%). The majority of participants (84%) in the study reported experiencing cancer-related distress. The results indicated that women and younger patients reported more stress. In addition, Filipino cancer patients reported more distress or a lower QOL when compared with the other three ethnic groups. Contrary to the investigators' expectations, both Japanese and Filipino American patients (64%) believed that a support group would have helped them, while only 38% of Hawaiians and 32% of European Americans responded that a support group would be helpful.

Another study reviewed the 10-year experiences of using support groups with Chinese women with cancer from San Francisco's Chinatown area.<sup>[26]</sup> The Chinese women in the study may be less acculturated in the Western society than those women who live outside of Chinatown. The Chinese women's cancer support group was initiated in 1994 as a 6-week education and support program for 22 Chinese women with cancer. The main purpose was to meet the emotional needs of Chinese women coping with cancer. Each session consisted of a 1-h educational lecture and a 1-h facilitated discussion. The meeting was conducted in Cantonese Chinese. In a survey evaluation at the end of 2002, most participants reported that the program helped them with coping with cancer by feeling more supported, less isolated, more hopeful, more knowledgeable about resources, and were now able to help others. A majority stated that they had applied skills they learned (i.e., Tai Chi, meditation, communication, coping with stress, centering, anger management, sharing, etc.) to their lives. Additionally, the women in the study also expressed difficulties in sharing their cancer experience with their young children. The study reported that in response to women's concerns, the "Dr. Play" children's support group for children age 4-14 was established in 1999. The women reported that the children's support group helped their children to feel more secure and self-assured, and more able to face the reality of their mothers having cancer. The authors suggested having a group conducted in their own language and having committed bilingual and bicultural group facilitators has been integral to the effectiveness of this support group. It is likely that the trust and support from facilitators and among support group members facilitated cognitive processing and psychological recovery for these Chinese women with cancer and their children in Chinatown.

In a similar study conducted in Australia,<sup>[28]</sup> a culturally and linguistically sensitive Chinese women BC support group was developed and evaluated. This study was based on a prior pilot study<sup>[5]</sup> and found that Chinese-Australian BC women with unmet information needs and frustration regarding the lack of culturally appropriate cancer support resources in their Chinese language. This support group was facilitated in Cantonese for a total of 8 weeks for 29 women. The group meeting involves educating patients on BC management and remission prevention by using culturally relevant examples (i.e., using Chinese food remedies to control cancer treatment side effects) and promoting patients sharing their information. The evaluation showed that the program was helpful in instilling a sense of interconnectedness among its users and minimized their feelings of alienation and helplessness. It helped these women connect with others with the same language and who are in similar situations. A majority of participants provided positive evaluations on the program and they strongly agree or agree that the program improved their understanding of BC management, increased their confidence in ability to cope, provided opportunities to share their questions or anxiety, and suited their needs.

## Discussion

### *Nursing implications*

There are immense opportunities for providing emotional group support to Asian cancer patients. As evidenced by the above review, there has been limited research investigating Asian cancer patients' perception and acceptance of support group intervention. However, the above studies suggest that Asian patients expressed interest in and benefited from cancer support groups similar to findings for Western patients.

Despite stereotypical assumptions that Asian culture devalues the public expressions of emotions, the principles associated SCPT as applied in cancer support group showed some promising benefits in Asian populations if the process integrates Asian cultural values and languages. Many Asians in Japan, China, Australia, Canada, and the US showed interest in the support group approach and believed a support group would help them in coping with cancer.<sup>[15,19,21,26-31,34,35]</sup>

The 7 articles completed in Japan provided some pioneer groundwork for studying support group intervention in Asian countries. The results indicated that support groups were relevant for Asian cancer patients when the intervention accounted for cultural differences. The participation rates in the Japanese studies were lower than those achieved in previous studies conducted in Western countries, which have ranged from 60% to 87%.<sup>[30]</sup> Cultural differences may explain the lower participation rate in these studies. Further research is needed to explore concerns of nonparticipants with and without interests

in a support group. Possible barriers may include lack of time, transportation and childcare issues, and stigma of having cancer. The stigma and negative beliefs about cancer could make it very difficult for Asian cancer patients. Some believed that it might have been caused by some crime the person committed in their previous life.<sup>[36]</sup> Additional psychosocial support interventions should also be explored to help ease cancer-related emotional distress for those Asian cancer patients who may not find a support group beneficial. Other types of cancer patients, Asian men with cancer, and other Asian subgroups can also be investigated with randomly controlled intervention studies in the future.

Similarly, the 5 studies conducted in Indonesia, Malaysia, Hong Kong, and Mainland China found support groups to be effective with Asian BC patients. Future studies should replicate findings using a larger sample size to clarify whether peer-led self-help supports benefits cancer participants and compare peer-facilitated groups with professional facilitated groups to examine whether there are differences in outcomes.<sup>[19]</sup> In addition, negative emotional effects of support groups, like grief of other members and feeling overwhelmed, were noted in some studies.<sup>[19,22]</sup> The support group interventions can take into consideration that group members bond through their mutual suffering, feel depressive over another group member's suffering, and need support on how to cope with depression and possibly, grief of a fellow member's death.<sup>[37,38]</sup>

While it was found that the support group has no effect on the body image, intimacy, and self-efficacy,<sup>[25]</sup> the possible effects of lack of culturally-sensitive measures and confounding effects from treatments can also be further explored. The adjuvant therapies, along with lymphedema complications, change the physical appearance of the breast and adversely affect women's psychosocial. Furthermore, women with limited functional status related to treatment and mastectomy are associated with low self-esteem, poor body image, and depressive symptoms.<sup>[33]</sup> However, other studies suggest that Asian women are less concerned with their body image and more concern on whether they are still able to perform their roles as a wife and mother.<sup>[29,39]</sup>

There were limited studies conducted in the Western countries regarding cancer support group among Asian ethnic groups and most of them were descriptive studies. Further studies with interventional designs are needed to evaluate the effectiveness of social-cognitive processing support group among Asian cancer patients in Western countries. Furthermore, from the above review, Japanese Americans, Filipino Americans, Native Hawaiian, Chinese Americans, and Chinese-Australian were the only Asians/Pacific Islanders studied to date in the Western countries. There are over 25 Asian ethnicities; each group is unique and differs in language, culture, and beliefs. Other Asian subgroups (i.e., Korean, Vietnamese Americans, etc.)

should also be studied to detect the within-group differences. Asian subgroup differences between Filipino and Japanese Americans were noted in the study.<sup>[21]</sup> Moreover, new immigrants, affected by communication barriers and unfamiliarity with the Western health care system and values, are likely to have different preferences of support.<sup>[21]</sup> The style of the facilitator is also likely to be important. For example, the bilingual and bicultural group facilitators was reported having was an important factor in making their support group program a success in Chinatown.<sup>[26,28]</sup> For example, it was reported that Japanese patients preferred an authoritative therapist style.<sup>[29]</sup>

Research findings suggest that individual difference factors may explain the variability in comfort levels of Asian with emotional expression and SS. It was found<sup>[18]</sup> that highly acculturated Asian Americans were very similar to European Americans in emotional expressions. However, age differences were more significant than either ethnic or acculturation differences. A higher distress level in younger women was consistent with the study of ethnic differences in emotional responses in both Chinese and European Americans.<sup>[40,41]</sup> Similarly, it was reported that younger cancer patients reported more psychosocial stress.<sup>[21]</sup> It is likely that age and acculturation differences are more significant than ethnicity alone in explaining the needs for psychological support. Furthermore, cancer patients of different stages have different needs; patients who are newly diagnosed and going under treatment seek related information. Some studies reported that Asian BC patients of different stages of illness have different motivation for attending support groups.<sup>[15,19,28]</sup> It was recommended that newly diagnosed patients be provided a structured group course until they have come to terms with their illness and decided on their treatment options. Then, the patients can focus on their emotions, become receptive to support, and develop coping methods. Further studies may also focus on the differences between support groups for early BC patients and those for patients straggling with metastatic disease to identify any different needs.

Finally, descriptive data suggest that health care providers and cancer patients may be poorly informed about the availability or potential values of support groups for Asians.<sup>[21]</sup> It is likely that many providers hold a stereotypical basis and believe Asians do not openly express emotions; therefore they may be hesitant to refer Asian patients to support groups. Proper education on the availability and values of a cancer support group should be provided to cancer health care providers and Asians cancer patients.

Without accounting for Asian immigrants overseas, the Asian population is expected to grow from 4.3 to 5.3 billion by 2050.<sup>[42]</sup> Their rapidly increasing numbers suggest the need for rigorous study of this population. Also, given that Western countries are increasing in diversity due to

transglobal travels, there is a demand for studies to examine how Western support groups met the needs of ethnic cancer patients. To improve the QOL of Asian cancer patients, psychosocial interventions should be further developed and evaluated. A theoretical framework provided by the SCPT has applicability to this group of cancer patients. Considering cultural differences when implementing psychosocial interventions based on SCPT, which have primarily been developed in Western culture, may help to achieve maximum psychosocial benefits in Asian populations.

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### Conflicts of interest

There are no conflicts of interest.

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