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# Investigating the Perceived Feasibility of Integrative Medicine in a Conventional Oncology Setting: Yoga Therapy as a Treatment for Breast Cancer Survivors

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# Abstract

**Background**—A majority of cancer survivors experience debilitating effect(s) related to their cancer diagnosis and treatments across physical, psychological, social, and spiritual domains. Timely and innovative solutions are needed to address the adverse treatment-related effects and often disjointed services that breast cancer patients face. Recent studies suggest that the majority of breast cancer survivors are using complementary and alternative medicine at some point along their cancer trajectory. In recent years, scientists and clinicians have examined the effects of yoga therapy among cancer patients and survivors. The current study examined the perceived feasibility of implementing yoga therapy as a treatment service for breast cancer patients at a large urban cancer center in Canada.

**Methods**—A mixed-methods approach that included focus groups and self-reported surveys with health care providers (HCPs) and breast cancer patients was used in this research.

**Results**—Overall, results indicated that breast cancer patients and HCPs were supportive and eager for the implementation of a yoga therapy program. Six themes emerged from the analysis of the focus group and the survey data: (1) the availability of resources and accessibility of yoga therapy, (2) the credibility and transparency of yoga therapy, (3) the understanding of yoga therapy, (4) an educational component, (5) the therapeutic context, and (6) the integration of yoga therapy. Specific facilitators and barriers became evident within these themes.

**Conclusions**—Although enthusiasm for the implementation of an integrative yoga therapy program was apparent among both breast cancer survivors and HCPs, barriers were also identified. The findings of this study are currently being used to inform a large-scale program of research aimed at developing integrative treatment services for breast cancer patients, beginning with yoga therapy.

**Declaration of Conflicting Interests** 

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## Keywords

breast cancer; complementary and alternative medicine (CAM); cancer survivors; integrated medicine; yoga therapy

## Introduction

A majority of cancer survivors experience debilitating effect(s) related to their cancer diagnosis and treatments across physical, psychological, social, and spiritual domains.<sup>1,2</sup> The effects of cancer can persist for years following treatment and often include cardiac and pulmonary damage, pain, loss of appetite, fatigue, reduced physical and sexual functioning, cognitive dysfunction, poor mental health, psychological distress, and impaired quality of life.<sup>3,4</sup> On completion of cancer treatment in Canada, patients receive care from primary and community health care providers (HCPs), who may not have access to information about the patient's treatment history and related effects, or the patient's prognosis and relative position on the curative to palliative trajectory. Furthermore, primary HCPs often lack information about cancer and how to support survivors. As a result, cancer patients commonly receive fragmented and uncoordinated care following completion of their cancer treatments, and consequently do not receive adequate psychosocial and medical attention.<sup>4,5</sup> Timely and innovative solutions are needed to address the adverse treatment-related effects and disjointed services that cancer survivors often face within conventional health service models.<sup>6</sup>

With an emphasis on wellness, integrative medicine attempts to coordinate conventional and complementary services, which may be one way to address the needs of cancer survivors. Recent studies suggest that the majority of Canadians living with cancer are using complementary and alternative medicine (CAM) at some point along their cancer trajectory, especially breast cancer survivors (BCSs).<sup>7,8</sup> CAM is composed of various theories, approaches, practices, and products that are outside the conventional medical model, but may complement conventional medicine through the use of therapies that address biobehavioral and psychosocial factors.<sup>8</sup> Integrative medicine orients the health care process to create a seamless engagement between patients and caregivers in complementary and conventional health services. Research also suggests that integrative interventions reduce medical costs in the long run and assist survivors in returning to work.<sup>9–11</sup>

Studies show that patients in Canada seek information and support from HCPs to make decisions about their use of CAM, particularly when using it alongside their conventional cancer treatments (ie, surgery, chemotherapy, and radiation).<sup>7,9</sup> Although research has shown that BCSs would prefer conventional medicine that includes complementary modalities, this is rarely offered in mainstream care in Canada.<sup>7</sup> It can be difficult for BCSs to make safe and informed treatment choices in an environment that does not integrate complementary services.<sup>7</sup> For well more than a decade, leading National Cancer Institute Comprehensive Cancer Centers and medical centers in the United States have aimed to assist patients in making CAM decisions and provide evidence-based CAM services.<sup>9,10</sup>

## Yoga Therapy as a Posttreatment Choice

A growing body of randomized controlled research indicates that yoga therapy has physiological and psychosocial benefits, including increased quality of life and decreased depression and fatigue, for the chronically ill.<sup>12–18</sup> In recent years, scientists and clinicians have examined the effects of yoga therapy among cancer patients and survivors.<sup>18–27</sup> Yoga is currently accessed by cancer survivors outside conventional cancer care to alleviate adverse treatment-related effects, including community centers and restorative yoga classes at local studios. Yet a large number of cancer survivors remain unaware of the physical and psychosocial benefits of voga therapy.<sup>25</sup> Furthermore, survivors are unaware of the most beneficial time in their cancer trajectory to use such a therapy.<sup>28</sup> Many of the integrative cancer centers in the United States incorporate yoga therapy into their treatment services (eg, referral programs, on-site programs). However, cancer centers in Canada have been slower to integrate yoga therapy into their treatment services, thereby limiting the accessibility of these modalities. Understanding the perceived feasibility of offering an integrative yoga therapy program (ie, a treatment option for survivors either by referral or within the cancer center) in the Canadian oncology context is an essential next step toward successfully designing and implementing appropriate integrative care services that effectively address BCSs' needs.

## **Research Objectives**

The current study examined the perceived feasibility of implementing integrative treatment services for BCSs (post conventional treatment) at a large urban cancer center in Canada. The larger aim was to understand the fundamental factors of implementing complementary treatment services by using yoga therapy as an integrative modality. HCPs and BCSs shared their views of the factors that would promote and impede the acceptability and sustainability of an integrated yoga therapy program. Furthermore, the knowledge of, attitudes toward, and use of CAM by HCPs was assessed. The findings of this study are currently being used to inform a large scale program of research aimed at developing integrative treatment services for BCSs, using yoga therapy as the initial complementary modality.<sup>29–32</sup>

# Methods

A mixed-methods approach that included focus groups and self-reported surveys was used to inform the research objectives. Two focus groups, one with HCPs and another with BCSs, were conducted to gain in-depth insights into factors that promote and impede the integration of a yoga therapy program into conventional cancer care. Participants also completed self-reported surveys. BCSs completed a CAM survey, which described CAM use and acceptability. HCPs completed a survey that considered knowledge, attitudes, and current professional practices related to CAM and integrative care (CAM Knowledge, Attitudes and Practice [CAM-KAP] survey).

#### **Participants**

A behavioral research ethics board approved this research, and all study participants provided written informed consent. All study participants participated in focus groups and

included 8 HCPs and 10 BCSs. HCPs were recruited using purposeful sampling and included those who were involved in providing cancer treatments to BCSs.

The BCSs were recruited through the cancer center breast tumor group using convenience sampling. The breast tumor group provided email distribution lists, and an informational email was distributed to recruit participants. For the purpose of this study, eligible BCSs were defined as individuals with cancer who had completed their primary treatments (ie, chemotherapy, radiation, mastectomy) no less than 3 weeks prior to study recruitment. This sample of BCSs and HCPs was appropriate in that we included HCPs who could best address our research questions as they represented the roles and disciplines that would be involved in implementing a yoga therapy program in this cancer center.<sup>33,34</sup> Furthermore, BCSs who had experienced treatment at this center were able to provide an informed view on factors that may act as facilitators or barriers to the integration of a yoga therapy program from the patient perspective.

#### **Data Collection and Analysis**

#### Self-report surveys

- 1. HCPs and BCSs were asked to complete a brief survey of 3 open-ended questions. The questions were as follows: (i) What are the personal, social, and health care system factors that could promote or impede the implementation of a yoga therapy treatment program? (ii) What types of resources would you need to either enroll in such a program or to integrate yoga therapy into treatment services? (iii) At what point within the cancer trajectory would a yoga therapy referral be most appropriate?
- 2. BCSs also completed a demographic form that outlined demographics, cancer treatments received, adverse treatment-related symptoms, details about leave-of-absences from work, and CAM modalities used throughout the cancer trajectory. BCSs were asked to indicate which symptoms they were experiencing from a list of common adverse treatment-related symptoms that had been documented extensively in the literature.<sup>4,18</sup> These items were derived based on consultations with clinicians currently working in the cancer center and who provided services to BCSs. These items were designed to gather data on factors that impact the sustainability and acceptability of a yoga therapy program.
- **3.** In addition, the CAM-KAP survey was administered to HCPs in order to explore acceptability and sustainability of integrating complementary modalities in conventional institutions. The CAM-KAP survey<sup>35</sup> was developed based on a previous study that explored HCPs' perceptions of CAM and integrative care in oncology.<sup>36</sup> The CAM-KAP survey was comprised of 87 Likert-type questions. These questions assessed knowledge, attitudes, readiness, and practice in the following manner:
  - i. *Knowledge:* This investigator-developed, 13-item subscale assessed health professionals' knowledge of the CAM decision-making process, the state of evidence for select CAM therapies, credible sources of CAM information, and the availability of CAM education opportunities.

- Attitudes: This 31-item subscale, adapted from the APP-CAM survey,<sup>37</sup> assessed health professionals' attitudes toward CAM and conventional care. This scale was designed to track changes in attitudes over time, and has been used to evaluate CAM curriculum in medical schools. Attitudes were assessed on a 4-point Likert-type scale ranging from strongly agree to strongly disagree.
- *Readiness:* This 17-item subscale assessed health professionals' openness and readiness to work with or refer survivors to CAM practitioners, and their confidence in supporting patients with CAM decisions. Select items were derived from 3 IM-30 survey subscales, which assessed health professionals' openness to CAM therapies, their readiness to refer patients to CAM practitioners, and their willingness to learn about CAM practices.<sup>38</sup> Readiness was assessed on a 4-point Likert-type scale ranging from strongly disagree to strongly agree.
- iv. Practice: This 26-item scale assessed health professionals' practice related to (a) communication with patients about CAM; (b) assessment of patients use of CAM; (c) patient referrals to CAM information sources, supportive care services, or other conventional or CAM practitioners to assist patients with CAM decisions; and (d) accessing CAM information and education resources. The frequencies of these CAM-related practices were assessed on a 5-point Likert-type scale ranging from never to always. This scale was derived from previous research<sup>36</sup> and informed by items from 3 subscales of the IM-30<sup>38</sup>: the awareness and openness to working with practitioners from other paradigms subscale, the readiness to refer patients to other paradigms subscale.

**Focus groups**—Two separate focus groups were conducted by the principal investigator who had no previous relations with any of the participants. One group was comprised of health care professionals and the other of BCSs. A focus group guide was developed to enable participants to explore their views about the feasibility of an integrated yoga therapy program. Each focus group began with a 10-minute PowerPoint presentation defining yoga therapy. Yoga therapy was operationalized within Patanjali's 8-Limb Path to Yoga and Therapeutics within Iyengar Yoga. The presentation emphasized how yoga is one of the oldest holistic health care systems in existence, focusing on both the mind and the body. Two thousand years ago the Indian sage Patanjali developed the basis of yoga philosophy, as often practiced today. Patanjali's Yoga Sutras<sup>39</sup> define the path of yoga as follows: (1) *yamas* (cultivate healthy attitudes in relationship to others), (2) *niyamas* (cultivate positive rapport with self), (3) *asana* (physical postures), (4) *pranayama* (breath work), (5) *pratyahara* (turning inward), (6) *dharana* (internal focus, concentration), (7) *dhyana* (meditation), and (8) *samadhi* (liberation, freedom from suffering).

Furthermore, the presentation outlined and defined the primary components of yoga therapy as practiced today within Iyengar Yoga.<sup>40</sup> These components include (1) structural imbalances (eg, anatomical), (2) neuromuscular patterning (ie, pain and pain management), (3) physiological (ie, digestive, cardiovascular, immune, endocrine, respiratory, reproductive, and nervous systems), (4) psychological, (5) spiritual/mindfulness, and (6) clinical and therapeutic (ie, assessment, diagnosis, treatment, and follow-up).<sup>\*</sup>

Specific questions posed to the focus group participants focused on factors most likely to influence the acceptability and sustainability of a yoga therapy program and recommendations for navigating survivors through such a program. Focus group participants were also asked for their opinions about program design and delivery factors that would influence the therapeutic context of a yoga therapy program, such as the most desirable location and length of yoga sessions.

Each of the focus groups was 1 hour in length and digitally recorded. Detailed notes were taken during the focus groups to capture important ideas and insights by participants. Two investigators listened to the recordings and read through these detailed notes. Words, phrases, or concepts that appeared relevant to research aims and were repeatedly stated by participants were highlighted by both investigators separately to generate an initial coding scheme. This initial coding scheme was examined to identify preliminary thematic categories. The thematic categories were refined and revised following discussions with the research team over the course of several meetings. Following thorough discussions with the investigative team, themes were collapsed and quotations from participants were used to substantiate the key themes.<sup>33</sup>

# Results

Various factors and concerns emerged that were perceived to play a role in integrating yoga therapy into conventional services at one of Canada's largest urban cancer centers. Table 1 highlights participant characteristics for the BCSs and HCPs and outlines adverse treatment-related symptoms experienced by BCSs. BCSs indicated the use of one or more of the following CAM modalities: reiki, acupuncture, massage, physiotherapy, naturopathy, meditation, or vitamin therapy. Of the 10 BCSs, 6 had previously practiced yoga. The same themes emerged for HCPs as for BCSs. In addition, within some of the identified themes, both HCPs and BCSs responded similarly. Furthermore, there was diversity of perspectives in both the HCP population and the BCS population.

The key factors identified by focus group participants and the combined survey data that would influence the acceptability and sustainability of a yoga therapy program were (1) the availability of resources and accessibility of yoga therapy, (2) the credibility and transparency of yoga therapy, (3) the understanding of yoga therapy, (4) an educational component, (5) the therapeutic context, and (6) the processes involved with integrating yoga therapy into treatment services.

<sup>\*</sup>These components and operational definitions of yoga therapy were developed by Senior Certified Iyengar Instructor Lisa Walford, Cofounder of Yoga Works, Los Angeles. For further information, please contact the author.

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## The Availability of Resources and Accessibility of Yoga Therapy

The focus group participants highlighted the importance of adequate resources being available to support the integration and sustainability of a yoga therapy program. A primary apprehension expressed by 5 of the HCPs was how funding for such a program would be solidified, as was evident in the question posed by one HCP: "Who will pay for all of the costs involved ... survivors or the Cancer Agency?" HCPs were curious to know where the funding would originate from and whether these funds would cover implementation costs, particularly related to the extra time and resources required. For example, participants expressed concerns about the time needed to refer patients, to develop systems of referral, and taking time away from their primary responsibilities. They were particularly concerned about burnout for staff and HCPs because of their current work load and finding additional funds and time to cover the new responsibilities. In addition, survey data indicated that none of the HCPs refer patients to an already existing independent integrative cancer treatment center that includes a yoga program in the same urban city.

In their responses to the 3 open-ended questions, 6 of the BCSs discussed their concerns about the high costs associated with complementary medicine. All 10 of the women strongly believed that finances would be a concern if the yoga therapy program fell outside the purview of covered medical services. This was of particular concern for those women who had taken an extended leave of absence from work. HCPs and several BCSs who participated in the focus groups recognized that out-of-pocket financial costs for survivors related to transportation and child care were barriers to the sustainability of a yoga program. One survivor explained, "I would need child care if the yoga sessions were held after my grandchild returned home from school, and I don't have the budget for extra child care." Two BCSs described their perception that mainstream yoga tends to attract Caucasians of higher socioeconomic status and that women from diverse ethno-cultural groups with limited financial resources and different cultural practices may face multiple barriers to participating. This was reflected in the words of a 45-year-old BCS who had been absent from work for more than 2 years, "I don't own a car, and I currently have difficulty gathering enough money to pay for the bus."

#### The Credibility and Transparency of Yoga Therapy

For an integrative yoga therapy program to be acceptable and sustainable, both BCSs and HCPs indicated that it must be credible and transparent. If published research on the effectiveness of integrative yoga therapy programs for cancer was made readily available, HCPs and BCSs may be more convinced of its effectiveness and thus be supportive of such a program. Each of the HCPs strongly agreed on the CAM-KAP survey that conventional cancer treatment should integrate complementary modalities that have a solid foundation of valid scientific evidence. HCPs and BCSs also expressed that the credibility of a yoga therapy program could be enhanced by having trusted HCPs, considered by many to be oncologists and nurses, recommend the program and provide background information about the yoga therapy instructors. One HCP suggested to "hold a monthly informational session where HCPs and survivors could meet the yoga therapists, therapist biographies and yoga therapy demonstrations could be provided, and published peer-reviewed, evidence-based research could be disseminated." Strategies identified in the focus groups to further enhance

credibility included providing information about the economic rationale and the cost effectiveness of yoga therapy. In addition, 3 of the study participants suggested that the goals of the program and the intervention components be clearly outlined (eg, breathing, meditation). One HCP suggested that "the objectives of the intervention must be simply and clearly stated and made available for HCPs to easily access and read." A BCS noted that "Everyone will need to buy in. Filtering the information to the physicians seems essential, including our family physicians." In regard to organizational and logistical components of the intervention, HCPs further recommended that the educational and marketing material refer to a website with downloadable material about the intervention itself. One BCS emphasized that she prefers "to receive information about the intervention and the treatment through take-home DVDs." Making information transparent in this manner would further enhance potential participants' and their HCPs' level of comfort with such a program. Establishing credibility, however, would require a fundamental understanding of yoga therapy among both HCPS and BCSs.

## The Understanding of Yoga Therapy

Breast cancer survivors and HCPs who participated in the focus groups emphasized that the manner in which the yoga program was framed would influence how it was accepted by HCPs and BCSs. For example, a BCS noted, "It seems that the lack of understanding of yoga often stems from their [HCPs and BCSs] belief in CAM." According to a registered nurse, "many people perceive yoga to have a religious affiliation, which could deter patients and families." There were 3 HCPs who felt that the Sanskrit language should be dropped when describing the intervention or yoga program, in promotional or educational material, including the word "Yoga," and instead be referred to using neutral language such as a "wellness" or "exercise" program. There was also consensus among the focus group participants that many survivors are unaware of what yoga entails and that some fear that special skills are needed to join a yoga therapy program, as reflected in one BCS's observation: "Many women feel that yoga is about putting yourself into a pretzel posture." Another BCS noted that "there seems to be skepticism about the various yoga practices, making it difficult to select a type of yoga."

## **An Educational Component**

From the perspectives of the study participants, the acceptability and sustainability of an integrative yoga therapy would largely depend on incorporating an educational component for BCSs and HCPs. The survey data indicated that the BCSs were looking for more education on complementary modalities and they were grateful for the recent opening and integration of a CAM education program within the cancer center. Six of the HCPs indicated on the CAM-KAP survey that they felt it was inappropriate to promote a complementary intervention or program outside their scope of practice or knowledge. This was echoed by a focus group participant who stated, "I would not refer a patient to a treatment unless I was thoroughly educated on the benefits and contraindications." To address their concerns, all the HCP's indicated in the CAM-KAP survey that they were interested in participating in continuing education programs about CAM to assist their patients in making CAM decisions.

According to participants, yoga therapy educational programs must include clear and concise information about the nature of yoga therapy, details of the specific program, goals of the program, and how yoga therapy would be integrated into, and complement, conventional services. As previously mentioned, it would be essential to also explain the evidence supporting the use of yoga therapy. According to the focus group participants, an educational component would be enhanced with readily available and easily accessible online information as well as in print form. A BCS suggested that the educational component be incorporated into the existing services they received during their cancer experience.

## The Therapeutic Context

The therapeutic context of an integrative yoga program was considered by many focus group participants to be a vital consideration influenced by the setting, perceptions of the safety of the program, and the involvement of family. Both HCPs and BCSs highlighted the need for a space and location that was not only convenient but also pleasant and met their needs. According to one HCP, "It will be challenging to find a location here at the cancer center due to constraints on space and resources available." Five of the survivors agreed that they would prefer a yoga program outside the cancer center and a few survivors mentioned that although community centers lack the expertise, they are cheaper and seem to, currently, be an alternative for some survivors looking for yoga. In addition, all the survivors agreed that an independent yoga practice at home is too challenging. All BCSs believed the therapeutic context of a yoga therapy program was also shaped by perceptions of the safety of the program. An HCP recommended that the voga therapist's experience be provided in written documentation so that patients, staff, and HCPs can be informed about their expertise. It was the opinion of both HCPs and BCSs that the therapeutic context of an integrative yoga program could be enhanced by involving family and friends. An HCP added, "I have observed how the family members play a significant role in whether survivors participate in modalities outside the conventional treatment services. Family members often encourage the survivors."

## Integrating Yoga Therapy

Overall, a high level of support for the integration of a yoga therapy program was expressed by both groups. However, both groups provided suggestions on how to move forward with integrating the program. The BCSs emphasized the importance of integrating a yoga therapy program into conventional services *early* in the cancer trajectory. None of the BCSs received information about complementary or alternative therapies; yet all 10 women wished they had access and information to join a yoga therapy program at diagnosis and especially during chemotherapy. One BCS asked, "Why don't we receive a tutorial on how yoga therapy assists with quality of life and adverse treatment effects right when we are diagnosed?" However, 2 of the BCSs felt that they experienced "information overload" when they were initially diagnosed with cancer. One BCS stated, "I remember feeling overwhelmed with all of the decisions I had to make when diagnosed ... and adding one more decision for me to make may have caused me further stress." Two HCPs suggested that there should be clear and concise rehabilitation goals that are client centered and that staff and HCPs should then be educated on the intervention and these rehabilitation goals. HCPs also recommended that referral guidelines for the yoga therapy program be designed, including the delegation of referrals to ensure that referrals are made in a timely manner, and when yoga therapy would be particularly beneficial. They mentioned that the development of referral guidelines would assist in implementing the program efficiently (ie, training new employees). There was also consensus that referrals should come from someone in the conventional medical team. For example, an HCP suggested, "patients may feel more secure with a referral when coming from an HCP that is aware of their current treatments and diagnosis." HCPs also noted that cancer patients are discharged to family physicians when they complete their cancer treatments and often at this time, there can be a loss of survivor contact information. According to a registered nurse, this may "create recruitment or attrition issues with a yoga therapy program or make it difficult to monitor and follow survivors over time."

# Discussion

Research on the benefits, both physiological and psychosocial in nature, of yoga therapy for cancer survivors has been accumulating in recent years.<sup>18–27</sup> Particularly, studies involving yoga therapy have found that the rates of depression and fatigue are decreased among participants whereas quality of life measurements show increased trends.<sup>12–17</sup> The findings from this study will be used to inform the integration of a sustainable yoga therapy program into a conventional cancer center. Overall, BCSs and HCPs were eager for a yoga therapy program to be implemented. Barriers, key facilitators, and program components were identified and need to be addressed to ensure the success of such a program. The findings indicated that the majority of BCSs had previously practiced yoga which could have affected their high level of support. The perspectives of the participants will not only inform the development of a yoga therapy program but serve as a foundation to build on when integrating other complementary modalities.

For an integrative yoga therapy program to succeed, timing ought to be carefully considered and educational materials and financial resources must be allocated accordingly. Survivors receive a great deal of information and education regarding health service options, when diagnosed with cancer. However, patients often feel most distressed and overwhelmed with information at this time. To prevent distress from information overload, a health service specialist from the conventional system with expertise in CAM could be available to answer questions and provide decision support. As patients move forward with treatment and begin to cope with adverse treatment-related effects, such as fatigue, chronic pain, and psychological distress, these specialists may assist cancer survivors who feel unsure about where and from whom to seek help. These specialists could introduce the yoga therapy program (or other evidence-based treatment modalities) to survivors at a beneficial time in their trajectory of healing and provide printed material about the various modalities and programs. The potential for information overload and the diverse needs of cancer survivors at various points in time highlights the need for what HCPs refer to as patient- or clientcentered care. Patient-centered care is an approach to providing health care that is respectful

of and responsive to individual patient preferences, needs, and values and ensures that patient values guide all clinical decisions.<sup>38</sup>

Each of the BCSs was looking for more education on complementary modalities, including evidence-based information. Although a few participants suggested that use of the Sanskrit language, including the word "yoga," could act as a deterrent to participation in a yoga therapy study, the substitution for "exercise" program is not an honest portrayal of either the philosophy or the goals of yoga therapy. Instead, the importance of increasing the educational component of what yoga therapy entails should be emphasized. We found that the current understanding of yoga might act as a barrier and that an educational component could facilitate the implementation of a yoga therapy program. A health service specialist with expertise in CAM could also cultivate patient-centered care and serve as an educational resource. Moreover, previous survivors and specific divisions of the cancer center (ie, Patient and Family Counseling, Pain and Symptoms Management) could provide sentiments about the physiological and biobehavioral benefits of the yoga therapy program. Firsthand accounts of the benefits of yoga therapy in conjunction with evidence-based information delivered by a trusted source may feed the referral process and sustainability of the program in the long run.

Care and consideration will be essential as a multidisciplinary team of conventional and complementary HCPs collaborate to develop written material for the yoga therapy program, including promotional and educational material. Experts in the field will need to address concerns about the Sanskrit language being a barrier to the acceptance of yoga therapy without losing its theoretical and philosophical foundation. Furthermore, written material will need to address common misperceptions about the skills needed to participate in a yoga program.

Integrative medicine strives to combine the best of both complementary and conventional modalities using a multi-disciplinary approach.

In integrative health care, the cohesive integration of the care processes, across caregivers and across institutions, is a fundamental organizational principle.<sup>9</sup> Research suggests that interprofessional collaboration and communication play important roles in integrative health services.<sup>41–43</sup> Yet this requires a basic level of understanding of the perspectives and practices of the diverse disciplines involved. Conventional health care professionals' level of knowledge about CAM has been found to affect their attitudes toward CAM<sup>42</sup> and likely their subsequent referral practices. This may be one reason why none of the HCPs in this study refer patients to existing integrative care services available within the community. Based on feedback from these HCPs, it seems that education is needed before a yoga therapy program will be successfully integrated within this particular cancer center.

This large urban cancer center recently incorporated a CAM education program that focuses on supporting survivors and HCPs in making safe and evidence-informed decisions about integrative and complementary health care. This new CAM education program has the resources to deliver education and information on behalf of the yoga therapy intervention. It was surprising that the HCPs in this study did not discuss the need for CAM providers to

also have access to education to enhance their knowledge of conventional cancer treatments and physical and psychosocial side effects. This will likely also need to be considered as part of the yoga therapy intervention.

The multidisciplinary team of conventional and complementary HCP committed to developing an integrative yoga therapy program would collaborate to design the interventions, including referral processes and therapeutic components. For example, there are programs in other large Canadian cancer centers where cancer survivors attend a yoga therapy program *outside* the cancer center.<sup>27</sup> In New York, survivors have the opportunity to attend yoga therapy sessions on site.<sup>41</sup> Several of the participants recommended that the yoga therapy program be held outside the cancer center. The multidisciplinary team would address issues such as clear and timely referral system and appropriate locations.

The findings of this study indicated that HCPs and survivors were concerned about available resources and accessibility of such a program. As suggested by the HCPs, securing funds to hire staff to design protocols that monitor, retain, and follow survivors over time not only supports the sustainability of the program but also supports the patients' continuity-of-care throughout their trajectory. These issues point to the need to approach integrative medicine in innovative ways, taking into consideration the publically funded Canadian health care system context. It also highlights the importance of tailoring new services and models of health care delivery to the existing services that exist in a region.

# Limitations

A major limitation of the study was the small sample size (HCP = 8 and BCS = 10) and the low number of focus groups. In particular, there were a low number of HCPs in our focus groups who were responsible for rehabilitation, such as a physiotherapist or nutritionist. Additional funding would have been required to conduct more focus groups.

# Conclusion

A large proportion of people living with cancer participate in complementary services to help cope with distress, increase quality of life, and recalibrate physiological systems. There has been a call for more research on yoga therapy to include appropriate control groups and examinations of potential mediators.<sup>19</sup> The current study examined factors that would potentially serve as building blocks in researching yoga therapy and integrating complementary services into health services for BCSs.

Developing integrative services within a cancer center provides survivors with cohesiveness, continuity-of-care, additional therapeutic options, and greater comforts.<sup>9,10</sup> Research has indicated that CAM modalities address many of the biobehavioral and psychosocial factors that are adversely affected by conventional cancer diagnosis and treatments. The study's findings will assist in developing cohesive care for BCSs in one of Canada's largest cancer centers by integrating yoga therapy into a conventional treatment system. Furthermore, the results will be used to design a referral system, which may be used as a template to foster the integration of other CAM modalities into conventional treatment services. The results of this research provide 2 potential areas of insight for other clinicians and researchers interested in

integrating yoga therapy into cancer care. The first area pertains to information about perceived feasibility, and the second to means of assessing the perceived feasibility of integrating yoga therapy into cancer care centers. We know that survivors seek information and support to make decisions about their use of CAM. The results for this study will be used to build and integrate the yoga therapy program with the assistance of the recently incorporated CAM educations program. As a result, survivors may receive education and support as they move forward with yoga therapy or other CAM services. At the very least, the results from this study may serve as a catalyst for HCPs to promote participation in some type of yoga program that will improve the quality of life for cancer survivors during their cancer trajectory.

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#### Table 1

## Participant Characteristics

Breast Cancer Survivors (n = 10)		Health Care Providers (n = 8)		
Average age	59 years	Social worker	1	
No. of survivors diagnosed between 2005 and 2008 <sup>a</sup>	9	Psychologist	1	
No. of survivors who had surgery	9	Radiation oncologist	1	
No. of survivors who received radiation therapy	9	Medical oncologist	1	
No. of survivors who received chemotherapy	6	Vocational rehabilitation therapist	1	
No. of survivors who received hormone therapy	6	Registered chemotherapy nurse	1	
No. of survivors who used a complementary modality in their cancer trajectory	7	Emergency care unit registered nurse	2	
No. of survivors who took an extended leave of absence from work because of adverse treatment- related symptoms	10	N/A		
Adverse treatment-related symptoms		N/A		
Psychological distress	7			
Depression	5			
Considerable fatigue	9			
Insomnia	6			
Muscle cramping	6			
Chronic pain	8			
Poor physical functioning	6			

<sup>a</sup>Focus groups were conducted in May 2008.