Original Article

Development of an Integrative Medicine Program for Breast Cancer Patients at the Largest Tertiary Referral Center in Thailand

O-charoenrat P, MD, PhD[1], Sa-nguanraksa D, MD, PhD[1], Thumrongtaradol T, MSc[1], Kummalue T, MD, PhD[2]

[1] Division of Head-Neck and Breast Surgery, Department of Surgery, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand
[2] Department of Clinical Pathology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Background: Studies have shown several benefits of combining complementary and alternative medicine (CAM) with conventional treatment in cancer therapy. This combined therapeutic approach is referred to as integrative medicine (IM). CAM has not yet gained acceptance by clinicians at several large hospitals in Thailand, and some cancer patients are using CAM without informing their physician.

Objective: The aim of this study was to investigate CAM-related opinions, interests, knowledge, and practices of Thai breast cancer patients for the purpose of developing an IM program at Siriraj Hospital, the largest referral center in Thailand.

Materials and Methods: Data relating to interest and frequency of participation in the following activities (both before and after cancer diagnosis) were collected: acupuncture, massage, tai chi, aerobic dance, herbal medicine use, aerobic exercise, detox, and meditation.

Results: Our results showed a decrease in frequency in all activities, except for tai chi, herbal medicine use, and meditation, after cancer diagnosis. The activities with the highest level of participation were massage, herbal medicine use, aerobic dance, aerobic exercise, and meditation. Regarding interests, 81% and 54% of patients expressed interest in joining meditation and exercise programs, respectively.

Conclusion: The results of this study support and will guide the establishment of an IM program in order to improve quality of life for breast cancer patients in Thailand.

Keywords: Breast cancer, Complementary and alternative medicine, Exercise, Integrative medicine, Meditation, Quality of life

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Complementary medicine refers to the application of a non-mainstream practice incorporated with conventional medicine while alternative medicine is a non-mainstream discipline which is utilized instead of standard medicine[1]. Integrative medicine (IM) combines the use of proven effective alternative medicinal practices and conventional medicine to create a patient-centered regimen designed to prevent or alleviate disease and/or to improve patient quality of life[2,3]. Complementary and alternative medicine (CAM) is defined as medical practices and products other than those performed and used in conventional medicine[2,4]. Clinicians, however, often do not accept the use of CAM due to inadequate scientific evidence validating its safety and efficacy[3]. The efficacy and safety of CAM has been extensively studied and practiced in cancer patients [e.g., Concerted Action for Complementary and Alternative Medicine Assessment in the Cancer Field (CAM-Cancer) project] in several elite hospitals and institutions in Europe, the US, and Australia-especially for stress reduction in patients to improve their quality of life[2, 5].

Approximately 25% of all new cancer cases in Thai population are breast cancer, which is the most prevalent type (42.41%) of cancer in women[6]. There are several risk factors that are associated with the development of breast cancer, including age, genetic deposition, obesity, and hormone receptor levels[7]. Treatments for breast cancer include surgery, irradiation, and chemotherapy, and their use (individually or in combination) depends on stage of disease, tumor size, expressions of estrogen and progesterone receptors, and expression of human epidermal growth factor receptor-2[8]. Results from the US CDC's National Health Interview Survey (NHIS) in both 2002 and 2007 revealed that CAM was used by approximately 75% of breast cancer patients. However, most of those patients did not inform their oncologist about their use of CAM, the use of which could counteract with chemotherapy and endocrine therapy[2].

Several studies have reported varied results of

Correspondence to:
Kummalue T.
Department of Clinical Pathology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand.
Phone: +66-2-4196504
E-mail: tanawan.kum@mahidol.ac.th

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CAM in cancer patients. Some randomized controlled trials found that massage and acupuncture reduced stress, fatigue, and pain in cancer patients, but only for 48 hours[9,10]. A meta-analysis study reported that tai chi improved quality of life and reduced stress in cancer patients; however, the authors recommended that further trials be performed due to the high risk of bias in previous studies[11]. Randomized controlled trials by Carlson, et al (2001)[12] and Nidich, et al (2009)[13] studied the effects of meditation plus standard treatment in older breast cancer patients. Both studies reported that patients experienced reduced stress symptoms and increased quality of life when combined therapy was compared with standard treatment alone. To measure stress and quality of life, they used the following metrics: Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-sp) scale, Short-Form Health Survey (SF-36) mental health and vitality subscales, and Profile of Mood States (POMS) and Symptoms of Stress Inventory (SOSI).

In addition, the effects of aerobic exercise on breast cancer patients have also been studied. One study reported that breast cancer patients who exercised one hour per day, twice a week for 12 executive weeks had significantly improved physical and psychological status, with a resulting improvement in quality of life[14]. Moreover, a systematic review reported that changes in lifestyle of stage I-II breast cancer patients, such as diet and exercise, increased patient life expectancy[15].

Based on these reported findings, CAM, when combined with conventional treatment in breast cancer patients, can yield improved psychological well-being and enhanced physical status, including improved muscle strength and blood circulation. In order to optimize the potential benefit and efficacy of CAM, it is necessary to investigate and learn the opinions, interests, and level of understanding[16] that breast cancer patients have about CAM in an IM treatment setting.

Materials and Methods

Recruitment and questionnaire-based data collection

Study participants were recruited via a signboard that was posted during the June 2015 to October 2016 enrollment/study period at the Breast Clinic, Division of Breast Surgery, Department of Surgery, Siriraj Hospital, Mahidol University, Bangkok, Thailand. Siriraj Hospital is the Thailand's largest tertiary referral center with approximately 1,000 new breast cancer patients treated annually. One hundred and sixty-three breast cancer patients were enrolled. A paper-based questionnaire was the data collection tool used in the present study. The questionnaire was developed by the authors and was reviewed and approved by the SIRB (792/2557(EC4).

Study participants were queried about the following items: their knowledge about CAM, what CAM-related activities hold their interest, and their perceptions regarding the benefits of using CAM; the frequency with which they participated in the following activities (both before and after being diagnosed with cancer): acupuncture, massage, tai chi, aerobic dance, herbal medicine, detox, exercise by walking, running, or jogging; and, whether any of the 7 aforementioned activities were beneficial and could alleviate pain. Regarding frequency, participants were asked how many times per month they engaged in each activity (never, once per month, twice per month, three times per month, or more than three times per month). Questions were included that focused on current meditation practice and patient interest in enrolling in a meditation program. Participants were also asked to give their opinion about their current weight and to describe their level of interest in enrolling in a weight-loss program.

Questionnaire data were recorded and quantified and the opinions, interests, knowledge, practices, and frequencies of use of participants both before and after cancer diagnosis were analyzed.

Statistical analysis

Results were analyzed and reported as descriptive information. Differences in frequencies of selected answers were analyzed by chi-square analysis and McNemar's test using SPSS Statistics v.13.0 (SPSS, Inc., Chicago, IL, USA). Data are reported as number or number and percentage. A *p*-value less than 0.05 was considered to be statistically significant.

Results

Participant demographic and questionnaire information

The average age of 163 participants was 56.81$\pm$8.9 years (range: 33 to 83) and two of the participants were male. For unknown reasons, some participants left some of the questions blank. As such, from all questions from 163 respondents, there were 23 items of missing data that could not be included in our analysis.

Knowledge about and interest in using IM or CAM

A majority of participants (72.1%) was not aware of IM at the time they completed the survey. However, just over half of patients (54.3%) had knowledge about alternative medicine. An equal number of participants (82.1%) expressed interest in using IM and CAM (Table 1 and 2, respectively). There was no difference between participants with and without interest in both IM and CAM.

Frequency of CAM-related activity participation before and after breast cancer diagnosis

The frequency of patient participation in CAM-related activities was significantly altered after breast cancer diagnosis for the following activities: acupuncture ($p = 0.004$), massage ($p = 0.031$), aerobic dance ($p = 0.002$), and aerobic exercises (walking, jogging, or running) ($p = 0.021$). In this part of the analysis, comparison was made between the frequency of participants selecting 'never' and a combination of the participants that selected 'once a month', 'twice a month', 'three times a month', and 'more than three times a month'. This was necessary due to the small number of participants or no participants that responded for some

choices. However, when we separately examined each answer choice, this group of participants had decreased frequency of participating in all activities after being diagnosed with cancer (Table 3).

Before being diagnosed with breast cancer, 7.4% (n = 10) of participants underwent acupuncture at least once a month. After diagnosis with breast cancer, the number of participants who continued having acupuncture decreased to 0.7% (n = 1). Twenty-six percent (n = 35) of participants had a massage at least once a month before diagnosis. That number of participants (18.8%, n = 25) was decreased after breast cancer diagnosis, especially in those who used to have a massage once a month and twice a month. The number of participants who engaged in tai chi and who performed detox was not different between before and after breast cancer diagnosis (3%, n = 4 for tai chi vs. 10.9%, n = 14 for detox and 2.3%, n = 3 for tai chi vs. 8.5%, n = 11 for detox, respectively). Approximately 25% of participants (n = 34) engaged in aerobic dance before diagnosis. That proportion decreased to 16.3% (n = 22) after breast cancer diagnosis. When we analyzed each choice, participants who did not participate in aerobic dance regularly (defined as once per month) had reduced frequency to never (6 of 10 patients). However, the majority of those who participated in aerobic dance regularly maintained or increased their frequency of participation in aerobic dance (2 of 7 in the '3/month' group increased to the '>3/month' group). Herbal medicine use was not significantly different between before (25.3%, n = 33) and after (21.4%, n = 28) cancer diagnosis. Four participants who had not used herbal medicine before being diagnosed with breast cancer started using it after diagnosis, and 3 of those used herbals more than 3 times a month. For aerobic exercise, which was defined as walking, jogging, or running, the percentage of participants engaging more than once a month before breast cancer diagnosis was 73.9% (n = 99), with a percentage decrease after diagnosis to 66.4% (n = 89).

Table 1. Patients knowledge about IM relative to patient interest in IM

	Knowledge about IM		Total interest in IM
	No	Yes	
Interest in IM			
No	22 (15.7)	3 (2.1)	25 (17.9)
Yes	79 (56.4)	36 (25.7)	115 (82.1)
Total knowledge about IM	101 (72.1)	39 (27.9)	140 (100)

Table 2. Patient knowledge about CAM relative to patient interest in CAM

	Knowledge about CAM		Total interest in CAM
	No	Yes	
Interest in CAM			
No	18 (12.9)	7 (5)	25 (17.9)
Yes	46 (32.9)	69 (49.3)	115 (82.1)
Total knowledge about CAM	64 (45.7)	76 (54.3)	140 (100)

Table 3. The number of Participants who Participated in alternative medicinal activities before and after breast cancer diagnosis at 5 frequency levels

Activity	Never	1/month	2/month	3/month	>3/month
Acupuncture					
Before	125	3	1	1	5
After	134	1	0	0	0
Massage					
Before	98	19	7	1	8
After	108	11	4	3	7
Tai chi					
Before	128	2	0	0	2
After	129	1	0	0	2
Aerobic dance					
Before	101	10	2	7	15
After	113	2	2	3	15
Herbal medicine					
Before	98	15	3	0	15
After	103	11	3	1	13
Detox					
Before	115	8	0	1	5
After	118	5	0	0	6
Aerobic exercise					
Before	35	22	10	8	59
After	45	13	10	6	60

Table 4. Patient interest in practicing meditation relative to patients that are or are not practicing meditation

	Interest in practicing meditation		Total (n = 140)
	No (n = 26)	Yes (n = 114)	
Currently practicing meditation			
No [n, (%) within each interest group]	23 (88.5)	40 (35.1)	63 (45.0)
Yes [n, (%) within each interest group]	3 (11.5)	74 (64.9)	77 (55.0)

Almost 7% (n = 9) of participants increased their frequency of aerobic exercise to more than 3 times per month, and 9.6% (n = 13) of those who previously engaged in aerobic exercise discontinued exercise after cancer diagnosis.

Meditation

Eighty-one percent of participants expressed interest in practicing meditation, and 65% of those had been practicing meditation before enrolling in this study. Significant association was found between patient cancer diagnosis and patient interest in practicing meditation [χ^2 (1) = 24.37; p<0.001] (Table 4).

Participant opinion regarding usefulness of and pain relief from using IM

Approximately 86% of participants (n = 103) said that they thought the use of IM to treat cancer patients would be beneficial. Seventy-six percent (n = 68) of those 103 patients said that they thought that IM might help to reduce pain in cancer patients. Interestingly, four of 14 patients who said that they thought that IM would not be beneficial for treating breast cancer patients said that they thought that IM might be able to alleviate pain.

Weight and exercise

Participants were asked to give their opinion about their weight, and those who selected 'Overweight' were later asked whether they wanted to enroll in a weight-loss program. Seventy-four percent (n = 57) of participants felt they were overweight, but only one participant (1.3%) had a BMI greater than 24.9 (overweight). Fifty-two of 57 participants (91%) expressed an interest in losing weight. However, when asked whether they were interested in enrolling a weight-loss program, only 31 of the 52 participants (62% of those wanting to lose weight, 54% of the participants selecting 'overweight') said they wanted to join the weight loss program, and most of those preferred joining only once a week. No significant association was found between participant opinion about their weight and interest in joining a weight-loss program (p = 0.41).

Discussion

Integrative medicine (IM) is a treatment approach that integrates conventional medicine with complementary and alternative medicine (CAM). In Malaysia, there is an increase in popularity of CAM and it is extensively used among patients with cancer[17] particularly breast cancer population[18]. CAM was described as a type of therapy in which methods of the conventional medicine such as biologically based practice, mind-body medicines, whole medical system, energy medicines, manipulative and body-based practice are not involved[19]. Complementary medicine is utilized as an additional approach to mainstream medicine, whereas alternative medicine is used to replace standard medicine[20]. According to the Concerted Action for Complementary and Alternative Medicine Assessment in the Cancer Field (CAM-Cancer) project, CAM can be divided into the following 5 categories: alternative medicinal system, biologically-based practices, energy medicine, mind-body medicine, and manipulative and body-based practices. There is a long history of CAM use in Thailand that includes Thai massage, herbal medicines, and meditation[2].

In this survey study, more than 70% of participants had no prior knowledge about IM, while approximately 60% of participants described being familiar with CAM. Even though CAM has been known for quite some time, IM practice is quite new in Thailand and most physicians focus on using conventional treatment only for cancer patients. However, most participants in this study expressed interest in both IM and CAM. As a result, promotional and educational events may be organized to introduce IM to cancer patients, their families, and health-care personnel, and to demonstrate the value and effective use of IM in cancer patients.

In the present study, the CAM activities that patients most frequently participated in both before and after breast cancer diagnosis were meditation, herbal medicine use, massage, aerobic dance, and aerobic exercise (walking, jogging, or running). There are some reasonable explanations why some activities were found to be more popular than others. First, there are several herbs available in Thailand that have been used as traditional drugs and supplements for a long time, hence their popularity among Thai and Chinese communities in Thailand. For massage, Thai massage is well-known and highly regarded among all age groups for its stress reduction, and Thai massage can be conveniently and affordably accessed in all parts of Thailand. Aerobic dance has been promoted since 2009[21] by the Thai government as an easy and enjoyable way to exercise. Since that time, aerobic dance groups have increased in number and popularity in parks in Bangkok and other big cities around Thailand. Regarding aerobic exercises like walking, running, and jogging, their popularity has increased in the past three years due to

their convenience and the lack of requirement for exercise-specific equipment or gear. Yoga has also gained interest as an exercise suitable for cancer patients and cancer survivors, because of its gentle and attentive nature[22]; however, we did not include yoga in the questionnaire, because yoga is more expensive and more difficult to practice in Thailand, as compared with aerobic dance and aerobic exercise. A significant decrease in the frequency of herbal medicine use after breast cancer diagnosis was based on oncologist advice that herbs could counter-affect chemotherapeutic and/or hormone treatments[2]. Reduction in patient participation in exercise and massage after diagnosis could be due to fatigue, discouragement, and pain. However, regular exercise under physician's care benefits cancer patients by reducing fatigue and risk of blood clotting, and improving muscle strength and physical balance[23]. Moreover, in some studies, the result was comparable to those from Canada (30%)[24] and the United States (20%)[25] when they used prayer before diagnosis. In contrast, this reduced to approximately 10% after diagnosis.

The reports about CAM application in breast cancer illustrate that demography, health, and style of living have an effect on CAM use. Additionally, it was found that the competence of CAM is equivalent to allopathic medicine in the clinical premises of Malaysian breast cancer patients; in addition, it was also a reason from progressive stage of cancer at presentation[26]. Most studies support the use of integrative medicine for mind and body management by improving the patients' psychological condition and ability to perform everyday tasks[27]. CAM treatment was also addressed by approximately by 55% to 65% of women investigated with breast cancer[28,29] 50% of patients with multiple cancer diagnoses[30,31], and by 41% of individuals diagnosed with melanoma[32]. Meditation, yoga, and massage were recommended for improving quality of life, and reducing fatigue, stress, depression, and anxiety[4].

There are very few exercise physiologists on the staff of most hospitals in Thailand. However, given the finding from the present study that cancer patients are interested in participating in exercise activities, more exercise physiologists, at least in large teaching hospitals, should be available for patients to consult to learn safe and suitable methods of exercise to improve the status of their disease and overall health. Our results showed that most of the participants that expressed interest in joining a meditation program had been meditating long before their cancer diagnosis. Many Thais practice meditation because Buddhism is Thailand's national religion and meditation is a foundational Buddhist practice. Meditation is also taught in most Thai schools and there are many groups and meditation centers in Thailand. Based on our finding that most study participants expressed an interest in joining a mediation program, meditation programs should be organized in Thai hospitals for cancer patients and patients with other diseases to access easily. Easy access to meditation-related resources in hospitals would benefit patients by helping them reduce stress and depression after meeting with their physicians[4,33,34].

Previous studies in CAM and IM on pain reduction showed inconclusive results, although most participants in this study thought that both CAM and IM could help to reduce pain. Massage was shown to significantly reduce pain in cancer patients, but only for a short period. Although acupuncture, tai chi, and exercises improved some physical and psychological stress, there was no apparent evidence to suggest significant pain reduction in cancer patients[4,22,35]. As a result, IM practice should be focused on improving emotional status and physical strength rather than on improving pain management. In addition, there are certain limitations in our study regarding methodology. The findings may not be completely postulated because a quantitative method may not be an ideal approach in our study and there is a sample size restriction. There is a requirement for future researchers to re-examine the specific method for gathering data which could be a qualitative method.

Conclusion

Participants in the present study showed interest in being treated with an IM treatment approach for their breast cancer care. Accordingly, an IM program that focuses heavily on meditation and exercise should be developed and implemented at Siriraj Hospital and perhaps at other large teaching hospitals in Thailand. Several participants described how they had already been practicing some CAM activities. Practicing these CAM activities as part of an IM regimen and under the advice and supervision of doctors and specialists would help to optimize the benefit that these patients can receive from their cancer treatment. Using IM for cancer care would not only improve the psychological and physical well-being of cancer patients, it would also increase the level of patient cooperation and compliance with cancer treatment, since they are more directly involved in the treatment process and they would have more direct responsibility for taking care of their mind and body.

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What is already known on this topic?

Integrative medicine (IM) combines the use of proven effective alternative medicinal practices and conventional medicine to create a patient-centered regimen designed to prevent or alleviate disease. CAM is defined as medical practices and products other than those performed.

What this study adds?

Practicing these CAM activities as part of an IM regimen and under the advice and supervision of doctors and specialists would help to optimize the benefit that these patients can receive from their cancer treatment.

Potential conflicts of interest

The authors declare no conflicts of interest.

References

1. Baldwin CM, Kroesen K, Trochim WM, Bell IR. Complementary and conventional medicine: a concept map. BMC Complement Altern Med 2004;4:2.
2. Dobos GJ, Voiss P, Schwidde I, Choi KE, Paul A, Kirschbaum B, et al. Integrative oncology for breast cancer patients: introduction of an expert-based model. BMC Cancer 2012;12:539.
3. Matovina C, Birkeland AC, Zick S, Shuman AG. Integrative medicine in head and neck cancer. Otolaryngol Head Neck Surg 2017;156:228-37.
4. Greenlee H, Balneaves LG, Carlson LE, Cohen M, Deng G, Hershman D, et al. Clinical practice guidelines on the use of integrative therapies as supportive care in patients treated for breast cancer. J Natl Cancer Inst Monogr 2014;2014:346-58.
5. MD Anderson Cancer Center. Complementary, alternative & integrative medicine [Internet]. 2020 [cited 2020 Feb 25]. Available from: https://www.mdanderson.org/treatment-options/complementary-and-integrative-medicine.html.
6. Sa-Nguanraksa D, Charoenrat E, Kulprom A, Samarnthai N, Lohsiriwat V, Nimpoonsri K, et al. Nomogram to predict non-sentinel lymph node status using total tumor load determined by one-step nucleic acid amplification: first report from Thailand. Breast Cancer 2019;26:471-7.
7. Sa-Nguanraksa D, Sasanakietkul T, Charoenrat C, Kulprom A, Charoenrat P. Gail model underestimates breast cancer risk in Thai population. Asian Pac J Cancer Prev 2019;20:2385-9.
8. Senkus E, Kyriakides S, Penault-Llorca F, Poortmans P, Thompson A, Zackrisson S, et al. Primary breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol 2013;24 Suppl 6:vi7-23.
9. Cassileth BR, Vickers AJ. Massage therapy for symptom control: outcome study at a major cancer center. J Pain Symptom Manage 2004;28:244-9.
10. Mehling WE, Jacobs B, Acree M, Wilson L, Bostrom A, West J, et al. Symptom management with massage and acupuncture in postoperative cancer patients: a randomized controlled trial. J Pain Symptom Manage 2007;33:258-66.
11. Zeng Y, Luo T, Xie H, Huang M, Cheng AS. Health benefits of qigong or tai chi for cancer patients: a systematic review and meta-analyses. Complement Ther Med 2014;22:173-86.
12. Carlson LE, Ursuliak Z, Goodey E, Angen M, Speca M. The effects of a mindfulness meditation-based stress reduction program on mood and symptoms of stress in cancer outpatients: 6-month follow-up. Support Care Cancer 2001;9:112-23.
13. Nidich SI, Fields JZ, Rainforth MV, Pomerantz R, Cella D, Kristeller J, et al. A randomized controlled trial of the effects of transcendental meditation on quality of life in older breast cancer patients. Integr Cancer Ther 2009;8:228-34.
14. Casla S, Hojman P, Cubedo R, Calvo I, Sampedro J, Barakat R. Integrative exercise and lifestyle intervention increases leisure-time activity in breast cancer patients. Integr Cancer Ther 2014;13:493-501.
15. Falavigna M, Lima KM, Giacomazzi J, Paskulin D, Hammes LS, Ribeiro RA, et al. Effects of lifestyle modification after breast cancer treatment: a systematic review protocol. Syst Rev 2014;3:72.
16. Gyasi RM, Agyemang-Duah W, Mensah CM, Arthur F, Torkornoo R, Amoah PA. Unconventional medical practices among Ghanaian students: A university-based survey. J Tradit Complement Med 2016;7:126-32.
17. Al-Naggar RA, Bobryshev YV, Abdulghani M, Rammohan S, Osman MT, Kadir SYA. Complementary/alternative medicine use among cancer patients in malaysia. World J Med Sci 2013;8:157-64.
18. Muhamad M, Merriam S, Suhami N. Why breast cancer patients seek traditional healers. Int J Breast Cancer 2012;2012:689168.
19. Leong BD, Chuah JA, Kumar VM, Yip CH. Breast cancer in Sabah, Malaysia: a two year prospective study. Asian Pac J Cancer Prev 2007;8:525-9.
20. Whitford HS, Olver IN. Prayer as a complementary therapy. Cancer Forum 2011;35:27-30.
21. Sopitarchasak S, Adulyanon S, Lorthong T. Thai Health Promotion Foundation: Innovation enabler for health promotion. World Health Popul 2015;16:62-71.
22. Singh P, Chaturvedi A. Complementary and alternative medicine in cancer pain management: a systematic review. Indian J Palliat Care 2015;21:105-15.
23. American Cancer Society. Physical activity and the cancer patient [Internet]. 2014 [cited 2016 Nov 15]. Available from: https://www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/physical-activity-and-the-cancer-patient.html.
24. Tough SC, Johnston DW, Verhoef MJ, Arthur K, Bryant H. Complementary and alternative medicine use among colorectal cancer patients in Alberta, Canada. Altern Ther Health Med 2002;8: 54-6, 58-60, 62-4.
25. Judson PL, Abdallah R, Xiong Y, Ebbert J, Lancaster JM. Complementary and alternative medicine use in individuals presenting for care at a comprehensive cancer center. Integr Cancer Ther 2017;16:96-103.
26. Taib NA, Yip CH, Low WY. A grounded explanation of why women present with advanced breast cancer. World J Surg 2014;38:1676-84.
27. Cassileth BR, Deng G. Complementary and alternative therapies for cancer. Oncologist 2004;9:80-9.
28. Lengacher CA, Bennett MP, Kip KE, Gonzalez L, Jacobsen P, Cox CE. Relief of symptoms, side effects, and psychological distress through use of complementary and alternative medicine in women with breast cancer. Oncol Nurs Forum 2006;33:97-104.

29. Fremd C, Hack CC, Schneeweiss A, Rauch G, Wallwiener D, Brucker SY, et al. Use of complementary and integrative medicine among German breast cancer patients: predictors and implications for patient care within the PRAEGNANT study network. Arch Gynecol Obstet 2017;295:1239-45.
30. Berretta M, Della PC, Tralongo P, Fulvi A, Martellotta F, Lleshi A, et al. Use of Complementary and Alternative Medicine (CAM) in cancer patients: An Italian multicenter survey. Oncotarget 2017;8:24401-14.
31. Wortmann JK, Bremer A, Eich HT, Wortmann HP, Schuster A, Fuhner J, et al. Use of complementary and alternative medicine by patients with cancer: a cross-sectional study at different points of cancer care. Med Oncol 2016;33:78-0790.
32. Loquai C, Dechent D, Garzarolli M, Kaatz M, Kaehler KC, Kurschat P, et al. Use of complementary and alternative medicine: A multicenter cross-sectional study in 1089 melanoma patients. Eur J Cancer 2017;71:70-79.
33. Johnson JR, Crespin DJ, Griffin KH, Finch MD, Dusek JA. Effects of integrative medicine on pain and anxiety among oncology inpatients. J Natl Cancer Inst Monogr 2014;2014:330-7.
34. Leclerc AF, Jerusalem G, Devos M, Crielaard JM, Maquet D. Multidisciplinary management of breast cancer. Arch Public Health 2016;74:50.
35. Deng G, Cassileth BR. Integrative oncology: complementary therapies for pain, anxiety, and mood disturbance. CA Cancer J Clin 2005;55:109-16.

การพัฒนาการแพทย์แบบผสมผสานเพื่อผู้ป่วยมะเร็งเต้านมในศูนย์ประสานงานรับและส่งต่อผู้ป่วยที่ใหญ่ที่สุดในประเทศไทย

พรชัย โอเจริญรัตน์, ดุลยพัฒน์ สงวนรักษา, ฐณวัฒน์ ธำรงธราดล, ธนวรรณ กุมมาลือ

ภูมิหลัง: การศึกษาวิจัยนี้ชี้ให้เห็นประโยชน์หลายประการของการใช้การแพทย์ทางเลือกร่วมกับการแพทย์แผนปัจจุบันในการรักษาโรคมะเร็ง โดยเรียกการรักษานี้ว่า การแพทย์แบบผสมผสาน การใช้การแพทย์ทางเลือกร่วมกับการแพทย์แผนปัจจุบันยังไม่เป็นที่ยอมรับอย่างแพร่หลายในโรงพยาบาลใหญ่หลายแห่งในประเทศไทย และผู้ป่วยมะเร็งบางรายมีการใช้การแพทย์ทางเลือกร่วมกับการรักษาแผนปัจจุบันโดยไม่ได้แจ้งแพทย์

วัตถุประสงค์: ศึกษาวิจัยการแพทย์แบบผสมผสานในเชิงข้อคิดเห็น ความสนใจ ความรู้และการปฏิบัติในผู้ป่วยมะเร็งชาวไทย เพื่อพัฒนาการแพทย์แบบผสมผสานในโรงพยาบาลศิริราช ซึ่งเป็นศูนย์ประสานงานรับและส่งต่อผู้ป่วยที่ใหญ่ที่สุดในประเทศไทย

วัสดุและวิธีการ: มีการเก็บข้อมูลที่เกี่ยวข้องกับความสนใจและความถี่ในการเข้าร่วมกิจกรรมทั้งก่อนและหลังการวินิจฉัยโรคมะเร็ง เช่น การฝังเข็ม การนวก ไทชิ การใช้สมุนไพร การเต้นแอโรบิค การล้างพิษ การนั่งสมาธิ

ผลการศึกษา: ผลการศึกษาแสดงให้เห็นว่าหลังการวินิจฉัยโรคมะเร็งความถี่ในการเข้าร่วมทุกกิจกรรมลดลง ยกเว้นไทชิ การใช้สมุนไพร และ การนั่งสมาธิ โดยกิจกรรมที่มีผู้เข้าร่วมมากที่สุด คือ การนวด การใช้สมุนไพร การเต้นแอโรบิค การออกกำลังการแบบแอโรบิค และการนั่งสมาธิ ร้อยละ 81 และ 54 ของผู้ป่วยมีความสนใจที่จะเข้าร่วมกิจกรรมการนั่งสมาธิและออกกำลังกาย ตามลำดับ

สรุป: ผลการศึกษาเป็นไปในทางสนับสนุนและยังสามารถใช้เป็นแนวทางในการพัฒนาการแพทย์แบบผสมผสานเพื่อพัฒนาคุณภาพชีวิตของผู้ป่วยมะเร็งในประเทศไทย