RESEARCH COMMUNICATION

Proportion of Gynecologic Cancer Patients Using Complementary and Alternative Medicine

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Abstract

Background and objectives: Complementary and alternative medicine (CAM) for treatment of cancer and for supportive care of cancer patients must be clearly separated. There is encouraging evidence for CAM in the latter area, such as acupuncture and progressive muscle relaxation for chemotherapy-related nausea and vomiting, and aromatherapy for decreasing anxiety and increasing quality of life. However, there are limited data about CAM used by gynecologic cancer patients, especially in Thai women. Therefore, the authors aimed to investigate the proportion and types of CAM using in our gynecologic cancer patients. Methods: This cross-sectional survey was conducted between October to December, 2008. Totals of 50 admitted and 50 walk-in gynecologic cancer patients 1-month after diagnosis, aged more than 20 years and able to give informed consent, were selected for one-by-one interview by random walking survey. Results: Among the 100 interviewed patients, aged 21-69 (mean=50.12), there were 46 cases of cervical cancers, 35 of ovarian cancers, 18 of endometrial cancers (two of these also had ovarian cancers), 2 of malignant gestational trophoblastic diseases, 1 of vulvar cancer, and 1 liver cancer (in a patient with ovarian cancer). Some 67% (95% CI, 57.8-76.2%) of them used CAM. As diet modifications, 11 used Chinese vegetarian, 8 common vegetarian, 5 Cheewajit, and 1 macrobiotics. Five of them used dietary supplements while colonic detoxification was emplyed in three. As herbal medicines, 27 used Thai herbs, 4 Chinese herbs, and 1 a herbal sauna. Twelve were receiving Thai massage. As exercises, 23 used aerobics and 5 stretching. Interestingly, 62 of them used Buddhist praying while only 3 employed native magic. Conclusions: The three most common forms of CAM used by our gynecologic cancer patients were Buddhist praying (62/67, 92.5%), followed by herbal medicines (27/67, 40.3%) and exercises (25/67, 37.3%).

Key Words: CAM - complementary and alternative medicine - gynecologic cancer patients

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Introduction

Popular complementary and alternative medicines (CAMs) include: acupuncture, aromatherapy, Bach flower remedies, biofeedback, chelation therapy, chiropractic, craniosacral therapy, herbalism, homoeopathy, hypnotherapy, massage, naturopathy, nutritional supplements, osteopathy, reflexology, relaxation therapy, special diets, spiritual healing, tissue extracts, and yoga. Individuals with osteoarthritis (OA), a common joint disease, commonly use CAM. Use of these therapies varies by racial/ethnic group (Katz and Lee, 2007). Some CAMs may be effective for symptom relief, while others may interact with prescription medications, suggesting that routine queries by physicians concerning CAM use would be beneficial.

Utilization of CAM was also common in fatiguing illnesses, and was largely accounted for by the presence of underlying conditions and poor physical and mental health. Compared to non-fatigued persons, those with chronic fatigue were most likely to use body-based and mind-body therapies (Jones et al., 2007). In addition, cancer patients generally have chronic fatigue, underlying conditions and poor physical and mental health.

In general surgical patients, use of CAM is relatively common, with younger, Caucasian patients with malignancies being the most common users. However, there seems to be no difference in perceived postoperative problems, nor actual postoperative complications between CAM and non-CAM users (Velanovich et al., 2006). Gynecologic cancer patients are both medical and surgical patients.

The use of CAM among cancer patients is widespread and appears to be increasing. However, it is not clear whether patients use CAM as an "alternative" to standard oncology care or as an adjunct to the conventional treatment they receive. Most patients use CAM to "complement" the conventional therapies of radiotherapy, chemotherapy, hormone therapy and surgery. Health professionals in general have expressed positive views when CAM is used "complementarily" and not as an "alternative". Results so far published have shown that CAM can contribute to improving the quality of life of cancer patients and their general well-being (Adams and

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Jewell, 2007).The European Society of Mastology (EUSOMA) has issued recommendations on the role of CAM in the management of early breast cancer. The advice, the product of a workshop held in Florence, Italy, at the end of 2004 and published in the European Journal of Cancer (Baum et al., 2006). The authors of the recommendations also say the potential benefits of CAM in the supportive care of cancer patients, particularly those for whom a cure is unlikely, should be more widely recognized and investigated.

The new recommendations from EUSOMA include the following (Baum et al., 2006): (1) All patients with breast cancer should be treated by multidisciplinary teams that provide the best chances of cure, palliation, psycho-social and spiritual support. (2) Undergraduate and postgraduate students should be taught communication skills as a central component of professional development. (3) All health professionals should be taught about the needs of patients for spiritual support, and access to these services should be facilitated within the health services. (4) There can be only one standard for the evaluation of interventions to improve the length and quality of survival of patients with breast cancer, irrespective of the type and origin of the treatments. (5) Clinical case histories and randomized controlled trials (RCTs) should contain a module that identifies patients' belief systems and concurrent use of CAM, and there should be open and factual discussions between patients and healthcare professionals about CAM.

According to a systematic review (Nahleh and Tabbara, 2003), national surveys suggest that from 48-70% of breast cancer patients have used CAM. Paradoxically, another systematic review of randomized controlled trials of CAM in breast cancer (Ernst et al., 2006) failed to identify a single effective CAM intervention in the treatment of breast cancer. Authors emphasized that "CAM for treatment of cancer (for which there is, to the best of their knowledge, no evidence of efficacy) and CAM for supportive care of cancer patients, must be clearly separated in their thinking." (Ernst et al., 2006) They cited "encouraging evidence" for CAM in the latter area, such as acupuncture and progressive muscle relaxation for chemotherapy-related nausea and vomiting, and aromatherapy for decreasing anxiety and increasing quality of life (Ernst et al., 2006).Because there are limited data about CAM used by gynecologic cancer patients, especially in Thai women, authors aimed to investigate the prevalence and types of CAM using in our Thai women treated in Department of Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand, in this study.

Materials and Methods

After IRB approval in September, 2008, this cross-sectional survey was done between October to December, 2008. According to data from a systematic review (Nahleh and Tabbara, 2003), we have known that 48-70% of breast cancer patients have used CAM. Also, from our pilot study in 20 patients, proportion of CAM using was 50%, which is within that range. Therefore, authors estimated proportion (P) of using CAM in our gynecologic cancer patients to be 50%. Sample size was calculated by "N=Z@2P(1-P)/e2", while e=0.1, and Z@=1.96, then N turned out to be "97". 50 admitted and 50 walk-in gynecologic cancer patients after 1-month of diagnosis, aged more than 20 year-old and were able to give their informed consent, were selected for one-on-one interview by random walking survey.STATA version 10.0 statistical software was use, P-values were analyzed by t-test for continuous data, Fisher's exact test for categorical data, and Z-test for difference of proportions.

Results

Among the interviewed 100 patients, aged 21-69 (mean=50.12) year-old, there were 46 cervical cancers, 35 ovarian cancers, 18 endometrial cancers (two of these also have ovarian cancers), 2 malignant gestational

Table 1. Comparison of Characteristics between CAM Users and Non-users

Characteristic	Users	Non-users	p-value*
Age[#]	50.7 (48.4-53.0)	48.9 (45.5-52.4)	0.38
Occupation			0.44
None	18	6	
Farmer	36	18	
Government officer	7	2	
Employee	3	4	
Businesswoman	3	3	
Marital status			0.55
Single	4	0	
Married	54	28	
Husband died	7	3	
Divorced	2	2	
Education			0.81
None	1	1	
Primary school	44	23	
Grade 7-9	5	4	
Grade 10-12	5	2	
Vocational diploma	2	0	
Bachelor degree	10	3	
Income (THB/month)			0.63
Less than 5,000	48	25	
5,000-10,000	9	2	
10,001-50,000	9	5	
More than 50,000	1	1	
Diagnosis			0.20
Cervical cancer	27	19	
Ovarian cancer	28	7	
Endometrial cancer	11	7	
GTT	2	0	
Vulvar cancer	1	0	
Stages			0.01*
1	20	20	
2	14	7	
3	27	5	
4	6	1	
Chemotherapy[$]	60 (89.6%)	16 (48.5%)	<0.01*

*p-values were analyzed by t-test for continuous data Fisher's exact test for categorical data, and Z-test for difference of proportions; [#]mean (95% CI); CAM=Complementary and Alternative Medicine; THB=Thai Baht; GTT=Gestational Trophoblastic Tumor; [$]N(%)

Table 2. Types of Complementary and Alternative Medicine Employed by CAM Users (N=67).

Types	Number	%	95% CI
Buddhist praying	62	92.5	86.2-98.8
Herbal medicines	27	40.3	28.6-52.0
Exercises	25	37.3	25.7-48.9
Diet modifications	16	23.9	13.7-34.1
Thai massage	12	17.9	8.7-27.1
Dietary supplements	5	7.5	1.2-13.8
Colon detoxification	3	4.5	0.0-9.50
Native magic	3	4.5	0.0-9.50

trophoblastic diseases, 1 vulvar cancer, and 1 liver cancer (in a patient with ovarian cancer). 67% (95% CI, 57.8-76.2%) of them used CAM. There was no significant difference in age, occupation, marital status, education, income, or diagnosis between CAM and non-CAM users. However, stages of cancers and proportion of receiving chemotherapy were significantly higher in CAM users ($p=0.01$ and $p<0.01$, respectively) (Table 1).

Three most common forms of CAM used in our gynecologic cancer patients were Buddhist praying (62/67, 92.5%), followed by herbal medicine (27/67, 40.3%) and exercises (25/67, 37.3%), respectively. (Table 2) As herbal medicines, 27 used Thai herbs, 4 used Chinese herbs, 1 used herbal sauna. As exercises, 23 used aerobic, 5 used stretching exercises which are 4 Yoga and 1 long-stick dance. 12 of them used Thai massage. As diet modifications, 11 used Chinese vegetarian, 8 used common vegetarian, 5 used Cheewajit, and 1 used macrobiotics. 5 of them used dietary supplements while colonic detoxification was used in 3. Additionally, 3 of them used native magic according to their beliefs.

Discussion

In October, 2008, just a month after our IRB approval, there was a study from King Chulalongkorn Memorial Hospital, Bangkok, Thailand, presented in the 2008-IGCS meeting that among 200 gynecologic cancer patients interviewed between July, 2005 to February, 2006, 82 (41%) of them used CAM (Vasuratna et al., 2008). The most popular CAMs used were foods and dietary supplements (45.1%) followed by herbs (37.8%) (Vasuratna et al., 2008). Only the latter was similar to our study (40.3%). The factors that were statistically significant associated with utilization of CAM were education ($p=0.014$), financial status ($p=0.027$), occupation ($p=0.003$), stage of diseases ($p<0.001$) and chemotherapy treatment ($p<0.001$) (Vasuratna et al., 2008). The last two were also found in our study. Except for use of herbs, stage of diseases, and chemotherapy receipt, these data from Bangkok were unlike our data from Khon Kaen as prevalence of CAM using among our patients was higher [67% (95% CI, 57.8-76.2%)] while education, financial status, and occupation were not significantly associated with utilization. The reason for this inconsistency should be cultural difference between these two groups of patients.

Although 67% prevalence of using CAM in our patients was different from 41% of Bangkokean gynecologic cancer patients, it was similar to 65% of Nigerian cancer patients (Ezeome and Anarado, 2007) and within range of 48-70% reported in the systematic review (Nahleh and Tabbara, 2003) of breast cancer patients we used in sample size calculation. Like our study, the use of CAM found in Ezeome and Anarado's study (2007) was not affected by age, marital status, level of education, religious affiliation, or socioeconomic status. In addition, the most frequently used CAMs which were herbs (51.9%) and praying (49.4%) (Ezeome and Anarado, 2007), were similar to our study as praying and herbs were among the top two. Although breast cancer patients were reported using 45% exercises and 40% herbs, as first and second ranks, respectively (Shen et al., 2002), these were also very similar to our patients (37.3% exercises and 40.3% herbs, as third and second ranks, respectively).

Although our study was not as big as the one from Bangkok, our result was consistent with many studies mentioned above in many aspects, either in proportion or types of CAM used. This showed that our study was both precise and accurate. An important finding is that, as all our patients were Buddhists, 92.5% used Buddhist praying. This was understandable and may be the point to encourage them for continuation as this should be regarded as a kind of complementary self-administered stress management. Also, this kind of stress management training was shown to be cost effective in cancer patients undergoing chemotherapy like most of ours (Jacobsen et al., 2002, Herman et al., 2005).

In summary, our study's results showed that proportion of using CAM in gynecologic cancer patients was 67%, similar to Nigerian's study in cancer patients (Ezeome and Anarado, 2007) and a systematic review in breast cancer patients (Nahleh and Tabbara, 2003), but different from 41% in Bangkokean gynecologic cancer patients (Vasuratna et al., 2008). However, stage of diseases and chemotherapy receipt found to be related to CAM using were similar to the Bangkokean's (Vasuratna et al., 2008). In addition, the herbal uses of 40.3% was very similar to the three previous studies of 37.8% (Vasuratna et al., 2008), 40% (Shen et al., 2002), and 51.9% (Ezeome and Anarado, 2007), respectively.

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