RESEARCH COMMUNICATION

Complementary and Alternative Medicine Use by Gynecologic Oncology Patients in Turkey

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Abstract

   The use of complementary and alternative medicines (CAM) among women with gynecologic cancer is becoming increasingly popular. Therefore, it is important to gain insight into the prevalence and factors related to the use of CAM. The aim of this study was to assess the use of CAM in women with gynecologic cancer. This is a descriptive cross-sectional study. Data were obtained from 67 gynecological cancer patients at gynecologic oncology clinic of a hospital in Turkey between October 2009 to December 2010 using a questionnaire developed specifically for this study. The instrument included questions on socio-demographic information, disease specifics and complementary and alternative medicine usage. On the basis of women's responses, all participants were divided into 2 groups: CAM users and nonusers. The findings indicated that 61.2% of the women reported the use of 1 or more CAM therapies. There were no significant differences in the sociodemographic and clinical characteristics between CAM users and nonusers (P <0.05). The most frequently used CAM method was herbal therapy (90.2%) and the second was prayer (41.5%). The main sources of information about CAM were informal (friends/ family members). A considerable proportion (56.1%) of CAM users had discussed their CAM use with their physicians or nurses. Turkish women with gynecologic cancer frequently use CAM in addition to standard medical therapy. Nurses/ oncologists caring for women with gynecologic cancer should initiate a dialogue about usage of CAM, discussing the potential adverse effects of CAM and the patient's therapeutic goals.

Keywords: Complementary and alternative medicines - gynecologic cancer - Turkey

Introduction

   Cancer is a major disease burden worldwide and most people perceive it as a frightening and untreatable disease that implies death. Each year, tens of millions of people are diagnosed with cancer around the world, and it is estimated that in 2020, this number will reach 15 million (Turgay et al., 2008; Ma and Yu, 2006). Use of CAM is growing rapidly recent years among cancer patients.

   Complementary and alternative medicine (CAM) is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine (NCCAM 2011). Complementary/alternative medicine has been described as 'diagnosis, treatmentand/or prevention which complements mainstream medicine by contributing to a common whole, satisfying a demand not met by orthodoxy, or diversifying the conceptual frameworks of medicine (Ades and Yarbro, 2000).

   An unknown number of patients with cancer in Turkey are using complementary and alternative medicine (CAM) products or practices. There have been fewer studies conducted with patients with gynecologic cancer in Turkey. Those studies that have been conducted over the past decade indicate that a variety of CAM therapies

among patients with gynecologic cancer are used. Studies investigating the prevalence of CAM use in cancer care have reported that between 31% and 84% of gynecologic cancer patients in Turkey (Mazicioğlu et al., 2006; Yıldırım et al., 2006; Akyuz et al., 2007; Kav et al., 2008).

   The seven major categories of CAM include mind-body interventions, traditional or folk remedies, special diets or nutrition programs, herbal medicine, manual healing, chemical or pharmacologic agents, and bioelectromagnetic applications (NCCAM, 2011). Swisher and coworker found that 56 CAM users ingested some type of CAM. Of CAM users, 23% used herbal therapies or other plant extracts, 23% ingested high-dose vitamins and/or minerals, 14% used medicinalteas (including green teas and essiac), 18% used nontraditional diet therapy (including juicing), and 7% took shark cartilage, 79% used a psychological orspiritual therapy, 32% used meditation, yoga, or other relaxation techniques (Swisher et al., 2002). A study conducted by Akyüz et al (2007) in Turkey reported that patients with gynecologic cancer used praying, worshipping, therapeutic touch, high-dose vitamin and mineral therapy, herbal therapy, animal organs, aromatherapy, diet regimens, acupuncture, electromagnetic therapy, psychologic therapies, dreaming, massage therapy, relaxation therapies, meditation (Akyüz

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et al, 2007). Many cancer patients use CAM to provide treatment or cure, support treatment or cure, prevent cancer and recurrence, as a substitute for conventional treatment, and as a last resort in combination with conventional medicine (Yıldırım et al., 2006; Molassiotis et al., 2006; Fasching et al., 2007).

CAM has been performed for centuries and is still being accepted as an alternative therapy. However, usually untrained people in this district practice CAM techniques. Although gynecologists and oncologists are aware of the widespread use of CAM, more information is needed regarding beliefs and perceptions of CAM use. The aims of this study were (a) to determine the prevalence of complementary alternative medicine use among patients with gynecologic cancer (b) to determine the types of CAM used, (c) to describe sociodemographic and medical factors associated with the use of CAM.

Materials and Methods

Setting and Sample

The cross-sectional survey study was performed on 67 patients with gynecologic cancers who were admitted to the Gynecologic Oncology Department of Çukurova Universitesi Balcalı Hospital between October 2009 to December 2010. To be eligible, needed to be diagnosed with a gynecologic cancer at least 1 month before the interview. Patients assessed as in a preterminal state or who were too ill to complete the interview were excluded.

Instruments

Data were collected using a semistructured questionnaire administered to the gynecologic oncology patients who were treated for cancer at Balcalı Hospital, part of the largest university hospital in Mediterranean region of Turkey, located in the city of Adana. Almost all patients with cancer in this region, especially in Adana and its surrounding areas, receive cancer treatment there. The semistructured questionnaire form was developed specifically for this study using questionnaires from previously published studies as a guide. Swisher et al., 2006, Akyuz et al., 2007; Gözüm et al., 2007; Supoken et al., 2009; Yıldırım, 2010). Face validity for questionnaire was determined by researchers. The questionnaire was divided into 3 sections, the first of which was related to the patients' sociodemographic characteristics, such as age, education level, marital status, occupation. Participants' economic statuses were described as income < expenditure or income = expenditure using self-report by the subject. The second section of the questionnaire was related to diseaserelated characteristics, such as type of cancer, treatment modality, time of diagnosis, status of recurrence of cancer.

The third section of the questionnaire asked patients whether or not they used any form of CAM . The researcher described CAM to the patients. Then, patients were asked whether they had ever used or were using any of the following 12 CAM therapies: acupuncture, aromatherapy, herbal medicine, nutritional supplements, exercise, relaxation therapies (including relaxation,

hypnosis, meditation, yoga, and biofeedback), imagery, massage therapy, prayer, homoeopathy, energy healing (including Reiki) or other CAMs mentioned by the participants. Classification of the CAM categories was based on the CAM classification of the National Center for Complementary and Alternative Medicine. After the participants were asked for the type of CAM they use, other questions such as reason for use, information source toward CAM modalities, anticipated benefits and adverse effects, and communication about CAM use with physicians or nurses were also asked. Open-ended questions were used, and answers were categorized

Procedures

Because the clinic chief's approval is enough to carry out the descriptive studies, the study was approved by the chief of Obstetric and Gynecologic Clinic of Balcalı Hospital, Çukurova University. In order to obtain patient's verbal consent, all participants were informed of the purpose of the study, ensured that the collected information would be used solely for scientific purposes, would be kept confidential and not shared by others except the researchers. All participants were also assured that their explanations with regard to CAM use would not affect their future care and would not be used for other purposes than scientific researches.

A face to-face interview method to administer the questionnaires by the researcher was used. The interviews, which lasted for about 15 minutes, were conducted by the investigator in the patient's room. Disease-related characteristics were obtained from patient files.

Data Analyses

The statistical analyses were performed using SPSS for Windows version 13.0. Descriptive statistics were calculated for all variables. The study participants were categorized as either CAM users or nonusers. Comparisons between the groups were assessed using the Chi-square

Table 1. Sociodemographic Characteristics of Users and Nonusers of Complementary and Alternative Medicine Therapy

Characteristics	Users (n=41)		Nonusers (n=26)		P
Educational status					
Read and write	20	48.8	11	42.4	
Primary school	10	24.4	9	34.6	0.837
High school	6	14.6	3	1.5	
University	5	12.2	3	11.5	
Marital status					
Married	24	58.5	17	65.4	
Divorced	3	7.3	3	11.5	0.579
Widowed	14	34.2	6	23.1	
Occupation					
Housewife	39	95.1	23	88.5	0.312
Worker	2	4.9	3	11.5	
Economic status					
Income<expenditure	22	53.7	17	65.4	0.343
Income≥expenditure	19	46.3	9	34.6	
Place of residence					
City		46.3	10	38.5	

Table 2. Disease-Related Characteristics of Users and Nonusers of Complementary and Alternative Medicine (CAM) Therapy

Characteristics	Users (n=41)		Nonusers (n=26)		P
Type of cancer					
Ovarian cancer	31	75.6	23	88.5	
Endometrial cancer	7	17.1	3	11.5	0.465
Cervical cancer	2	4.9	-	-	
Tubal cancer	1	2.4	-	-	
Treatment modality					
Surgery	7	17.0	1	3.8	
Chemotherapy	22	53.7	20	76.9	0.114
Surgery +Chemo	12	29.3	5	19.3	
Time of diagnosis					
1-6 month	17	41.5	7	26.9	0.471
7-12 month	7	17.0	5	19.3	
1 year and longer	17	41.5	14	53.8	
Status of recurrence of cancer					
Yes	14	34.1	13	50.0	0.197
No	27	65.9	13	50.0	

test and Student t test. P<0.05 was accepted as the level of prespecified statistical significance.

Results

The sociodemographic characteristics of the patients with gynecologic cancer are summarized in Table1. The average age of the patients was 58.23 years (SD = 12.3). 28.4 % were primary school graduates, 61.2 % of the patients were married, and 92.5% were housewives.
The medical characteristics of the patients with gynecologic cancer are summarized in Table 2. The

Table 3. Type and Prevalence of CAM Therapies Used by the Patients. CAM Indicates Complementary and Alternative Medicine

CCAM method* n= 41	N	%
Herbal therapy	37	90.2
Massage therapy	2	4.9
Relaxation therapies	1	2.4
Diet regimens	4	9.8
(high protein content fruit and vegetable-based)		
Praying	17	41.5
Acupuncture	1	2.4
Psychologic therapies	4	9.8
Aromatherapy	1	2.4

* 'Respondents may report more than one answer

most frequent diagnosis included ovarian cancer (80.6%). More than half (62.7%) of the patients were currently receiving chemotherapy. There were no significant differences between users and nonusers of CAM regarding educational level (P = .837), marital status (P = .579) and occupation (P = .312). There were also no differences between the groups with respect to type of cancer (P = .465), treatment modality (P = .114), Time of diagnosis (P = .471), Status of recurrence of cancer (P =0.197) (Tables 1 and 2).

Of the 41 (61.2%) women used multiple types of CAM. Most of the CAM users were using herbs. Of the 41 CAM users, 37 (90.2%) used herbal therapies, 17 (41.5%) used praying, 4 (9.8%) ingested diet regimens. Four women (9.8% of users) used a psychological therapy, two women (4.8%) used massage therapies, one women (2.4%) used relaxation therapies (Table 3)

Table 4. Distributions of Names and Primary Reasons for Use of Herbal Supplements Used Among the Herbal Supplement Users

English Name	Latin Name	Turkish Name	N	%	Primary Reason for CAM Use
Sage tea	*Salvia officinalis*	Ada çayı	2	5.4	Treat cancer (n = 1) Achieve physical and emotional well-being (n = 1)
Liquirrhitae radix	*Glycyrrhize glabra*	Meyan kökü	4	10.8	Treat cancer (n = 1) Achieve physical and emotional well-being (n = 1) Relieve cancer treatment-related symptoms (n=2) Boost immune system (n = 1)
Stinging nettle	*Urtica dioica*	Isırgan	14	37.8	Treat cancer (n = 10) Achieve physical and emotional well-being (n = 1) Relieve cancer treatment-related symptoms (n=2) Boost immune system (n = 1)
Green tea	*Camellia sinensis*	Yeşil çay	4	10.8	Treat cancer (n = 1) Achieve physical and emotional well-being (n = 2) Relieve cancer treatment-related symptoms (n=1)
Black mulberry	*Morus nigra*	Urmu dutu	2	5.4	Boost immune system (n = 2)
Juniper	*Juniperus Nanawilid*	Ardıç tohumu	3	4.5	Achieve physical and emotional well-being (n = 3)
Parsley	*Petroselinum crispum*	Maydanoz	2	5.4	Treat cancer (n = 1) Relieve cancer treatment-related symptoms (n=1)
Camomile	*Anthemis nobilis*	Papatya	2	5.4	Treat cancer (n = 1) Relieve cancer treatment-related symptoms (n=1)
Ginger	*Rhizome zingiberis*	Zencefil	3	7.1	Treat cancer (n = 1) Boost immune system (n = 2)
Turmeric	*Curcuma longa*	Zerdeçal	1	2.7	Treat cancer (n = 1)

Table 5. Information Sources of CAM Users About CAM Therapies

	N	%
Information Sources of CAM Users About CAM Therapies		
Herself	7	17.1
Family members	13	31.7
Media or Internet	6	14.6
Friends	14	34.1
Healthcare providers	1	2.4
Discussed with nurse/physician		
Yes	23	56.1
No	18	43.9

Among the herbs used, 37.8 % used stinging netle, 10.8% used green tea, 10.8% used Liquirrhitae radix. The main reasons for using CAM were to treat cancer (48.8%), to achieve physical and emotional well-being (24.4%), to relieve cancer treatment-related symptoms (9.0%), to boost immune system (7.5%) (Table 4). 90.2 % of patients reported that they observed benefits after CAM. The most common actual benefit these women perceived was an improvement in psychosocial well-being, including increased hope or optimism. However, only one patient (2.4%) reported no benefits from using CAM. One patient (2.4 %) also reported side effects from using CAM.

Participants were asked where they had gotten information about CAM. These data are detailed in Table 5. 31.7 % of women received information about CAM from their family members. Only one patient received information about CAM from a physician, nurse, or practitioner of CAM. 56.1% of patients stated that they were informed their nurse/physician about CAM.

Discussion

This study documenting the use of CAM in a group of patients with gynecological cancer. The prevalence of CAM therapy use among patients with gynecological cancer in the current study is higher than that reported by Yıldırım et al, Fasching et al, Molassıotis et al, (58%, 44%, and 40%, respectively), lower than that reported by Richardson et al., Boon et al. (89%, 67%, respectively), but comparable to the prevalence reported by Von Gruenigen et al (60%). The generally high and possibly growing prevalence of CAM use by patients with cancer renders this topic an important candidate for rigorous investigation.

The literature suggests that there may be a typical profile of CAM user, with younger age, higher educational level, and higher economic status commonly reported (Richardson et al, 2000; Von Gruenıgen et al, 2001; Henderson and Donatelle 2004; Gözüm et al, 2007). However, in the present study, this was not confirmed as our sample of CAM users did not differ significantly from the group of nonusers. This suggests that a typical profile of CAM user may not exist, as many patients with cancer will do everything to have a better chance with their illness, irrespective of their sociodemographic characteristics.

The CAM used by patients was mostly herbal therapy. This finding was consistent with other studies conducted in Turkey and other countries. Previous Turkish studies had indicated that herbal therapies among adult patients with cancer were the most used alternative methods of treatment (Ceylan et al., 2002; Gözüm et al., 2003; Akyüz et al., 2007; Kav et al., 2008, Gözüm et al., 2007; Yıldırım, 2010). This result was also consistent with other studies related to this topic, in that herbal therapies among patients with cancer were one of the most used alternative methods of treatment noted (Molassiotis et al, 2006; Matthews et al, 2009).

Our population had a high usage of spiritually therapy (prayer) similar to that reported by Swısher et al. (2002). That the second most common CAM method is prayer is not surprising in Turkey, where an estimated 99% of people are Muslims, who pray and believe that whatever happens comes from God. Spiritual strategies seem to entail minimal risks of side effects or interactions with conventional treatment and, on the other hand, may even make patients feel better. Therefore, nurses/ physicians should avoid categorical rejection of this form of CAM treatment.

Stinging nettle is the most frequently reported CAM in this study. Interest in herbal therapies has been growing rapidly in Turkey. Commonly used herbs used in Turkey include stinging nettle (U. dioica) for the treatment of illnesses (Gözum and Unsal 2004). Herbal combinations (mainly U. dioica) are also the most frequently used remedy among adult patients with cancer (Ceylan et al, 2002). The traditional attitudes and beliefs of the people, the easy access to this plant, and the low cost help to explain a higher rate of selecting stinging nettle in our study and other Turkish studies in this area. However, some CAM, especially certain herbs, can be potentially dangerous for patients or might be dangerous when combined with conventional cancer treatment that patients are already receiving. Herbs can cause direct and indirect health risks and benefits.

The main reasons reported in the present study for using CAM are similar to those reported elsewhere (Swisher et al, 2002; Molassiotis et al, 2006; Akyüz et al, 2007; Yıldırım et al, 2010). The idea of using CAM to treating cancer was reported significantly more often by patients. The data suggest that patients may want to maintain optimism and hope when faced with cancer, and this may be one of the key motivators for patients to use CAM (Risvo et al., 1999).

The most frequent sources of information about CAM (friends and family members) are similar to those reported by Shen et al. (2002) and Swısher et al. (2002). Only about 2.4% of patients received CAM information from their physicians and/or nurses. It is probable that patients do not reveal CAM use to conventional health professionals because of fear of negative feedback. These findings also indicate that patients rely on informal and uncontrolled information and personal testimonials. The quality of this information may be very low. However, good-quality information sources are available to the clinician (Kiefer et al, 2001). Good communication skills and open discussion about CAM issues with the patients is the key to protecting them from inappropriate and unhelpful use of CAM but also to assist them to reach the most appropriate decision

for them about CAM.

At the current study, a significant number of patients with gynecologic cancers prefer CAM techniques as an additional therapy to modern cancer therapy. Most women with gynecologic cancer commonly used CAM therapy among them is herbal medicine. It was determined that patients with cancer usually received information about CAM from not so scientifically reliable sources such as relatives, friends and the media. Healthcare providers should routinely ask their patients about CAM use and discuss the positive and negative results of CAM use with them. Also, because of the high prevalence of the use of CAM therapies among women with cancer, healthcare providers dealing with cancer treatment should increase their knowledge about these therapies.

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