Alteration of Complementary and Alternative Medicine Usage in Patients with Cancer in Turkey

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Abstract
Use of complementary and alternative medicine CAM is commonly encountered among cancer patients. The method most commonly adopted is the use of alternative medicine products. In this study, use of CAM by Turkish cancer patients, its frequency and CAM usage alteration in over time according to results of previous studies were evaluated. Patients were enrolled from a single centre (Kayseri Training and Research Hospital) and the data of total 559 patients were recorded. The rate of CAM usage was 62.1% in general population. Of the patients adopted a method of CAM, 11.8% was using alternative medicine products, 60.1% was using complementary medicine and 28% was receiving support from both. Patients with breast cancer were the most frequent subgroup adopting a method of CAM. Most frequently used alternative medicine products were urtica dioica, nigella sativa and salvia officinalis. Music, exercise and prayer were the most common methods of complementary medicine. Turkish cancer patients have switched from alternative medicine products which could show in vivo interaction with the cancer therapy to the methods of complementary medicine which do not interact with the cancer therapy in vivo.

Keywords: Cancer, Alternative medicine, Complementary medicine, CAM

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Introduction

Complementary and alternative medicine (CAM) is defined as ‘a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine [1]. Pain palliation, strengthening immune system and reducing the side effects of the therapy can be regarded as the reasons for the use of alternative medicine products [2,3]. Use of CAM has shown an increase among cancer patients in recent years in the general population [4]. In a study comprising 13 countries, rate of CAM usage was reported to be 7-64% with a mean prevalence of 31.4% [1]. In other studies it has been reported 78.5% CAM usage among Korean patients with cancer and 76% among patients with cancer in Singapore [5,6].

The subgroups of CAM involve biologically based practices (herbal remedies, vitamins, other dietary supplements), mind-body techniques (meditation, guided imagery, expressive arts [music therapy, art therapy, dance therapy], manipulative and body-based practices (massage, reflexology, exercise), energy therapies (magnetic field therapy, Reiki, Healing Touch, qi gong), ancient medical systems (traditional Chinese medicine, Ayurvedic medicine, acupuncture) [7]. The patients with cancer most commonly employ nutritional products (18%) and secondly give particular importance to exercise (13%) [8]. CAM is most common among patients with breast cancer (86%) and brain tumours (30%) [9,10].

Our aim in this study was to determine the rates of CAM usage among Turkish cancer patients and to find out the most frequently adopted methods of CAM. Additionally, we sought to evaluate alteration in CAM methods used by Turkish cancer patients over time.

Materials and Methods

Totally of 559 patients, admitted to Kayseri Training and Research Hospital, were included in the study. Of the patients 43.2% had breast cancer, 18.7% had lung cancer, 10.9% had
genitourinary cancer, 9.6% had colorectal cancer, 8.5% had gastric cancer and 8.7% had other cancer types. Other cancers included (8.7%) were hepatocellular carcinoma, gastrointestinal stromal tumour, lymphoma, oesophageal tumour, malignant melanoma, pancreas cancer, mesothelioma, thyroid cancer, and soft tissue sarcoma.

Firstly, patient consent was obtained from the patient. Face-to-face interview was conducted with the patients. The patients were asked regarding their CAM usage. The alternative treatment methods were divided into three categories: Herbal products, vitamin support, and a combination of both. The complementary methods were divided into exercise, massage, music, dance, prayer, cream, aromatherapy, acupuncture, and yoga. Their responses to the directed questions were recorded using SPSS 16.0 package programme. And descriptive statistics (frequency analysis and crosstabs) was performed.

**Results**

Mean age of the 559 patients was 56±12 years. Of the patients, 36.4% were male and 63.5% were female. Among the total study population, the rate of CAM usage was 62% and of CAM using patients, 11.8% used alternative medicine products, 60.1% used complementary medicine, and 28% received support from both.

When considering sex, 60.3% of males and 63.1% of females received support from CAM. Both groups were employing mostly complementary medicine. In the total study population, the rate of CAM usage was 69.1% among patients at and below 50 years of age and 58.7% among patients above 50. Rates of CAM usage according to sex and age are shown in Table 1.

When the tumour types were considered, CAM usage was most frequent among patients with breast cancer (69.8%). This was followed by patients having genitourinary system (GUS), lung, and colon cancers (62.3%, 56.2% and 53.7%, respectively). Alternative medicine -
products were mostly frequently used by the patients with GUS and lung cancer (11.5% and 10.5%), and the use of complementary medicine was more frequent among patients with breast and GUS cancer (42.6% and 36.1%). The results are given in Table 2.

When we evaluated alternative medicine products, herbal medicine products were more prominent (59%) (Table 3). The rate of vitamin supplements was 33.3% and the rate of both of them was 7%. The herbal products used most commonly were urtica dioica (16%), nigella sativa (12%), salvia officinalis (12%), grape seed (5%), chamomile (5%), curcuma (3%) and cinnabar (3%). Vitamin complexes (52%) and vitamin B complex (18%) were the most commonly used vitamin supplements. The types of alternative medicine products used and their rates are given in Table 4. It should be noted that some patients used more than one type of CAM.

The frequency of patients receiving support from complementary medicine (complementary medicine alone or in combination with alternative medicine) was 88.1% and the majority of these patients were employing more than one technique. Music was the most frequent type of complementary medicine used by the Turkish cancer patients with a rate of 43%. This was followed by exercise (38%), prayer (30%), massage (7%) and aromatherapy (7%) (Table 5). It should be noted that some patients used more than one type of CAM.

**Discussion**

The rates of CAM usage among Turkish cancer patients are close to those reported in other countries (the U.S., Germany, Austria, South America, Australia, New Zealand, UK, Holland, Denmark, Switzerland, Norway, Finland, Argentina) [1].

In previous studies, the prevalence of CAM usage among Turkish cancer patients has been reported to range between 22.1 and 84.1% [11]. In a study conducted on Turkish cancer
patients, herbal products were reported to comprise 95% of the use and practice of CAM and urtica dioica has been the most commonly employed herbal product [12]. In another studies on Turkish cancer patients, herbal products were again the most commonly preferred method of alternative medicine and urtica dioica and garlic were found to be the most commonly employed herbal product [13,14]. In addition, it has been reported that among the patients with cancer used CAM, 90.6% used herbal medicine [15].

The information provided and the two studies mentioned above were from Ankara, Turkey, in Central Anatolia, and date back 6 years. Our study, which was performed in Kayseri, Turkey, also in Central Anatolia, is a new study and contains some information differing from the previous ones. Our major finding is that Turkish cancer patients have switched from alternative medicine products to the methods of complementary medicine. Studies have reported frequent use of exercise, prayer and relaxation techniques [16]. In our study, the rate of adopting a method of complementary medicine was 60% alone and it reached 88% in combination with the use of alternative medicine products; music, exercise and prayer were the most frequently employed methods (43%, 38% and 30%, respectively).

This study revealed that the use of CAM among Turkish cancer patients is generally similar to that in other countries and the patients tend to prefer complementary methods rather than alternative medicine products. The reason for this could be the rising awareness among cancer patients and better understanding of drug interactions with alternative medicine products.

Conclusion

Turkish cancer patients tend towards the methods of complementary medicine which do not interact with the cancer therapy in vivo instead of employing alternative medicine products which could show in vivo interaction with the cancer therapy.
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References

