RESEARCH ARTICLE

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Received: 29.11.2019
Acceptance: 17.01.2020
DOI: 10.18521/ktd.652625

Konuralp Medical Journal
e-ISSN1309–3878
konuralptipdergi@duzce.edu.tr
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Investigation of the Status of Using Traditional and Complementary Medicine Practices in Patients Hospitalized in a Palliative Care Center

ABSTRACT

Objective: In parallel with the increase in the prevalence of chronic diseases in the world, there is an increase in cancer cases. When the patients admitted to the oncology polyclinics were examined; these patients were found to be receiving support from traditional and alternative medicine methods. In this study, we aimed to analyse the factors, results, cost, and especially the status of informing physicians before using traditional and complementary medicine (TCM) in the palliative care clinic in cancer patients hospitalized in our clinic and using TCM practices.

Methods: The study was cross-sectional and monocenter. The questionnaire was applied to the cancer patients who were between the ages of 18-80, hospitalized in the Palliative Care Center of Haydarpasa Numune Training and Research Hospital, who gave verbal and written consent to participate in the study, hospitalized for more than three days, and who were conscious and not currently receiving curative treatment.

Results: Of the patients, 29.7% stated that they applied TCM (n: 22). There was no correlation between the status of using TCM practice and age, gender, educational status and cancer stage. The most common method of TCM is phytotherapy. Of the patients, 50% used TCM method for the treatment of fatigue. Of the patients, 63.6% consulted their doctors before applying TCM method.

Conclusions: The fact that patients have prejudices that they will be evaluated negatively when they inform the health personnel about the TCM method they use makes it difficult to reach the real prevalence of TCM method use. In our study, the rate of patients telling TCM use to their doctors was found to be higher than the literature. We think that the biopsychosocial patient approach in palliative care increases the incidence of patients and their complaints in the treatment process.

Keywords: Palliative Care, Cancer, Traditional and Complementary Medicine

Bir Palyatif Bakım Merkezinde Yatan Kanser Hastalarında Geleneksel ve Tamamlayıcı Tıp Uygulamalarını Kullanma Durumunu Araştırma

ÖZET

Amaç: Dünyada kronik hastalıkların prevalansındaki artışa paralel olarak, kanser vakalarında da artış görülmektedir. Onkoloji polkliniklerine başvuran hastalar incelendiğinde; bu hastaların geleneksel ve alternatif tıp yöntemlerinden destek aldığı ya da destek almayı düşündükleri bulunmuştur. Çalışmamızda palyatif bakım kliniğimizde yatmakta olan kanser hastalarının geleneksel ve tamamlayıcı tıp (GETAT) uygulamalarını kullanma etkenlerini, sonuçlarını, maliyetini ve özellikle GETAT uygulaması kullanmadan önce hekimlerini haberdar etme durumunun analizini amaçladık.

Gereç ve Yöntem: Çalışma kesitsel ve tek merkezli nitelikte olup; Haydarpaşa Numune Eğitim ve Araştırma Hastanesi Palyatif Bakım Merkezi'nde yatmakta olan 18-80 yaş arası, çalışmaya katılmaya sözlü ve yazılı onam veren, üç günden fazla yatışı bulunan, bilinci açık, şu an küratif tedavi almayan kanser hastalarına anket uygulanarak yapılmıştır.

Bulgular: Hastaların %29.7 oranı GETAT uyguladıklarını (n:22) ifade etmiştir. Hastaların GETAT uygulama durumu ile yaş, cinsiyet, eğitim durumu ve kanser evresi arasında bir ilişki bulunmamıştır. Hastaların en fazla uyguladıkları GETAT metodu fitoterapidir. Hastalar %50 oranında halsizlik tedavisi için GETAT metodu kullanmıştır. Hastaların %63.6 oranında GETAT yöntemi uygulamadan önce doktorlarına danıştığı saptanmıştır.

Sonuç: Hastaların, kullandıkları GETAT yöntemini sağlık personeline bildirdiklerinde kendilerinin olumsuz biçimde değerlendirilecekleri ile ilgili ön yargılarının bulunması GETAT yöntemi kullanımının gerçek prevalansına ulaşmayı zorlaştırmaktadır. Çalışmamızda hastaların GETAT kullanımını doktorlarına söyleme oranı literatürden fazla bulunmuştur. Palyatif bakımdaki biyopsikososyal hasta yaklaşımının, tedavi sürecine hastanın ve yakınmalarının dahil edilmesinin bu oranı yükselttiğini düşünmekteyiz.

Anahtar Kelimeler: Palyatif Bakım, Kanser, Geleneksel ve Tamamlayıcı Tıp

INTRODUCTION

Palliative care (PC) foresees the biopsychosocial treatment and support of the patient and patient's relatives in increasing chronic diseases and cancer cases and was defined by World Health Organization (WHO) in 2002 as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness through prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other physical, psychosocial and spiritual problems" (1).

In parallel with the increase in the prevalence of chronic diseases in the world, there is an increase in cancer cases. Only nineteen years ago, annual cancer incidence that was 10 million in 2000 was predicted to be 15 million/year in 2020 (2). American Society of Clinic Oncology (ASCO) recommended in the clinical practice guideline updated in January 2017 that each patient with advanced cancer should get the special services at the beginning of the disease and together with active cancer treatment (3). When the patients admitted to the oncology outpatient clinics were evaluated, these patients were found to be receiving support or intending to receive support from traditional and alternative medicine methods (4).

According to the World Health Organization (WHO), traditional medicine is defined as "a set of theories and practices that play role in health care as well as in the diagnosis, treatment, cure and prevention of physical and mental diseases and that are based on from local cultural features to different cultural experiences". The concepts of complementary or alternative medicine instead of traditional medicine may be used in different countries (5). In recent discussions, it has been concluded that no alternative to medicine, but alternative methods to treatment are possible and the concept of "traditional and complementary medicine (TCM)" has come out (6). When the side effects during the treatment and pessimism and difficulties that cancer patients experience in that process are considered, it is always possible for these patients to apply to the methods of traditional and complementary medicine (7).

The first regulation on TCM practices was promulgated in the official gazette on 27th of October, 2014 and 14 TCM practices were approved. These practices are acupuncture, apitherapy, phytotherapy, hypnosis, hirudotherapy, homeopathy, cupping therapy, maggot therapy, mesotherapy, prolotherapy, osteopathy, ozone treatment, reflexology and music therapy (8).

Although there are studies on TCM practices used in cancer patients, studies on the approaches of PC patients to these practices are very rare. We aimed to evaluate the correlation between "PC" and "TCM practices" that are both conceptually new although they are available as practices in our country. Therefore, this study aimed to analyse the factors, results and cost of TCM use and especially the status of informing physicians before using TCM practice in the palliative care clinic in cancer patients hospitalized in our clinic and using TCM practices.

MATERIAL AND METHODS

This study is cross-sectional and monocenter and target population of the study is from the Palliative Care Center of Haydarpasa Numune Training and Research Hospital. Female or male cancer patients who were between the ages of 18 and 90, who gave verbal and written consent to participate in the study, who were hospitalized for more than three days at the Palliative Care Center between 09.11.2017-09.02.2018, and who were conscious and not currently receiving curative treatment were included in the study. The questionnaire form prepared for the volunteer patients consisted of two parts. The first part included the questions about the personal characteristics of the patients and the features of their diseases while the other part included questions about their status of using TCM practice after they were diagnosed with cancer.

Statistical Analysis: Patients' demographic characteristics, prevalence of using traditional and complementary medicine practices and status of informing their physicians about TCM were statistically analysed. Descriptive statistics (mean, standard deviation, minimum, median and maximum) were used to express continuous variables while categorical variables were expressed by using frequency (n) and percentile (%) values. Chi-square test (or Fisher's exact test where appropriate) was used to analyse the correlation between categorical variables. The statistically significance level was determined as 0.05.

Ethical committee approval for the study was obtained from Haydarpasa Numune Training and Research Hospital in 09.10.2018 with the decision number of HNEAH-KAEK 2017/129. The study was conducted in compliance with the Declaration of Helsinki.

RESULTS

This study aimed to analyse the prevalence of TCM practice use, factors affecting the practice, cost and results, complication rates, and the rates of informing physicians in the patients who were hospitalized with the diagnosis of cancer and who received palliative treatment at the Palliative Care Center of Haydarpasa Numune Training and Research Hospital. Out of 98 patients who were hospitalized with the diagnosis of cancer between 09.12.2017-09.02.2018 and appropriate for our study, 74 approved to participate and were included in the study. Forty patients (54.1%) were female and 34 (45.9%) were male. Educational background and other personal characteristics of the patients whose median age was 65 (min: 19 and max: 79) were given in Table 1.

Table 1. Demographic characteristics of the study population

Descriptive Characteristics	n	%	Descriptive Characteristics	n	%
Age groups			**Disease**		
18-40	**7**	**9.5**	**Lung cancer**	**12**	**16.2**
40-60	**21**	**28.4**	**Liver cancer**	**4**	**5.4**
60+	**46**	**62.2**	**Pancreas cancer**	**10**	**13.5**
Med. Age (Min-Max)	**65 (19-79)**		**Breast cancer**	**7**	**9.5**
Gender			**Gastrointestinal cancer**	**22**	**29.7**
Female	**40**	**54.1**	**Head and neck cancer**	**4**	**5.4**
Male	**34**	**45.9**	**Prostate cancer**	**2**	**2.7**
Educational Background			**Brain cancer**	**2**	**2.7**
Illiterate	**12**	**16.2**	**Cervical cancer**	**2**	**2.7**
Literate	**8**	**10.8**	**Other**	**9**	**12.2**
Primary School graduate	**29**	**39.2**	**Stage of Cancer**		
Secondary-High School graduate	**21**	**28.4**	**Mild**	**6**	**8.1**
University graduate	**4**	**5.4**	**Moderate**	**28**	**37.8**
Job			**Severe**	**40**	**54.1**
Unemployed	**7**	**9.5**	**Chemo-Radiotherapy**		
Housewife	**29**	**39.2**	**Yes**	**14**	**18.9**
Employee	**23**	**31.1**	**No**	**60**	**81.1**
Self-employed	**8**	**10.8**	**Those who prefer TCM**		
Officer	**7**	**9.5**	**Yes**	**22**	**29.7**
			No	**52**	**70.3**

Med.: Median; Min: Minimum; Max: Maximum

When the patients were asked about their status of using any TCM practice, 29.7% (n:22) stated that they applied TCM while 70.3% (n:52) stated that they did not apply. When the difference between TCM method use and genders was investigated, no statistically significant difference was found (p>0.05) (Table 2).

Table 2. Distribution of the status of using any TCM method according to the gender

		TCM use		Total (n/%)
		Yes (n/%)	No (n/%)	
GENDER	FEMALE	13 (59.1)	27 (51.9)	40 (54.1)
	MALE	9 (40.9)	25 (48.1)	34 (45.9)
	Total	22 (29.7)	52 (70.3)	74 (100.0)

x^2:0.32, df:1, p=0.57

When the effect of age variable on the status of TCM use was evaluated, no statistically significant difference was found between the age and the status of TCM use (p>0.05). When the correlation between educational level and the status of TCM use was evaluated, no statistically significant difference was found (p>0.05). There was no statistically significant difference between patients' cancer stages and status of TCM use, either (p>0.05) (Table 3).

Table 3. Distribution of patients' status of TCM use according to the stages of the disease

		Use of TCM		Total
		Yes (n/%)	No (n/%)	(n/%)
Stage	Mild	2 (33.3)	4 (66.7)	6 (100.0)
	Moderate	5(17.9)	23 (82.1)	28 (100.0)
	Severe	15 (37.5)	25 (62.5)	40 (100.0)
Total		22 (29.7)	52(70.3)	74 (100.0)

x^2:3.08, df:2, p=0.21

When the patients who used TCM method were asked which method they used, it was found that 59.1% (n: 13) received phytotherapy, 31.8% (n: 7) used vitamins out of their physician's advice, 4.5% (n: 1) received enema treatment and 4.5% (n: 1) received apitherapy. When they are asked about their monthly expenditure for TCM method they used, 10 patients (45.5%) stated their monthly expenditure as more than 100 Turkish Liras, 5 patients (22.7%) stated as 0-50 TL, 3 patients (13.6%) stated as 50-100 TL, and 4 patients (18.2%) stated that they did not know the cost (Table 4).

Table 4. Demographic characteristics of the group who used TCM and their characteristics related to TCM method

Descriptive Characteristics	n	%	Descriptive Characteristics	n	%
Age groups			**Reason of TCM use**		
18-40	**2**	**9.1**	**Recovery**	**8**	**36.4**
40-60	**8**	**36.4**	**Fatigue**	**11**	**50**
60+	**12**	**54.5**	**Pain**	**3**	**13.6**
Median Age (Min-Max)	**65 (27-79)**		**Benefit from TCM**		
Gender			**Beneficial**	**4**	**18.2**
Female	**13**	**59.1**	**Partially beneficial**	**10**	**45.5**
Male	**9**	**40.9**	**Non-beneficial**	**8**	**36.4**
Educational Background			**Side effect of TCM**		
Illiterate	**2**	**9.1**	**Yes**	**3**	**13.6**
Literate	**3**	**13.6**	**No**	**19**	**86.4**
Primary School Graduate	**11**	**50**	**Type of Side Effects**		
Secondary-High School Graduate	**6**	**27.3**	**Gastrointestinal**	**3**	**100**
Job			**Quitting treatment**		
Unemployed	**1**	**4.5**	**Yes**	**2**	**9.1**
Housewife	**9**	**40.9**	**No**	**2**	**9.1**
Employee	**6**	**27.3**	**Unknown**	**18**	**81.8**
Self-employed	**3**	**13.6**	**Consulting doctor**		
Officer	**3**	**13.6**	**Yes**	**14**	**63.6**
Disease			**No**	**8**	**36.4**
Lung cancer	**5**	**22.7**	**Consulting doctor**		
Liver cancer	**1**	**4.5**	**Yes**	**14**	**63.6**
Pancreas cancer	**5**	**22.7**	**No**	**8**	**36.4**
Breast cancer	**1**	**4.5**	**Approval of Doctor for TCM use**		
Gastrointestinal cancer	**6**	**27.3**	**Yes**	**9**	**64.2**
Prostate cancer	**1**	**4.5**	**No**	**3**	**21.4**
Other	**3**	**13.6**	**Unknown**	**2**	**14.2**
Stage of cancer					
Mild	**2**	**9.1**	**Cost of the treatment**		
Moderate	**5**	**22.7**	**0-50 TL**	**5**	**22.7**
Severe	**15**	**68.2**	**50-100 TL**	**3**	**13.6**
Chemo-Radiotherapy			**More than 100 TL**	**10**	**45.5**
Yes	**4**	**18.2**	**Unknown**	**4**	**18.2**
No	**18**	**81.8**	**Source of information**		
TCM method			**Other patients**	**4**	**18.2**
Herbal medicine	**13**	**59.1**	**People around them**	**8**	**36.4**
Vitamin supplement	**7**	**31.8**	**Media**	**3**	**13.6**
Enema treatment	**1**	**4.5**	**With doctor's advice**	**3**	**13.6**
Apitherapy	**1**	**4.5**	**Unknown**	**4**	**18.2**

When cancer patients were asked why they applied TCM method, it was found that 50% (n:11) used it for fatigue treatment, 36.4% (n:8) for cancer treatment, and 13.6% (n:3) for pain treatment. When they were asked whether they benefited from the use of TCM method in accordance with their purpose, 18.2% (n:4) stated that they benefited, 45.5% (n:10) partially benefited and 36.4% (n:8) did not benefit at all. When they were asked whether they experienced any side effects due to TCM method, 3 patients (13.6) stated that they had gastrointestinal complaints.

When the patients were asked where they heard TCM method from, 8 patients (36.4%) stated that they heard it from people around them and tried, 4 patients (18.2%) from people with the same disease, 3 patients (13.6%) from their doctors and 3 patients (13.6%) from media. When the patients were asked whether they consulted their doctors before they applied TCM method, 14 patients (63.6%) stated that they consulted while 8 patients (36.4%) stated that they did not consult. Out of 14 patients who consulted their doctors, 9 patients (64.2%) stated that their doctors approved, 3 patients (21.4%) stated that their doctors did not approve and 2 patients (14.2%) did not want to answer that question.

DISCUSSION

Cancer patients are exposed to several problems caused by both the disease and the treatment. Patients may use TCM method to fight against the symptoms. Therefore, it is crucial to evaluate patients' status of using TCM methods (9).

When the rate of TCM use in our country was evaluated, it was found to be ranging from 22.1% to 84.1%. When the cases in literature were evaluated, it was found that patients had prejudices that they would be judged negatively when they informed the health personnel about the TCM method they used (10). Gras et al. found in their studies in which they evaluated TCM practice in cancer patients that 83% of the patients had applied TCM method at least once since the beginning of anti-cancer treatment (11). The fact that one of the countries with the highest rates of TCM method use was China increased the rate. In our study, results were similar to other studies performed in our country and revealed that 27.7% of the patients used a TCM method.

Islamoglu et al. found in the study in which they evaluated the status of using TCM methods in patients with psoriasis that there was no correlation between gender and educational background and TCM use, however, the mean age of the ones who used TCM was lower than that of the ones who did not use (12). Akcay et al. found in the study in which the use of complementary and alternative treatment in children and parental information were evaluated that there was no correlation between TCM use and the age and educational background of the parent (13). Sait et al. found in the study in which the perception of cancer patients who used TCM was evaluated that patients who used TCM were older and had higher educational level and that the number of female patients was higher when compared to the ones who did not use, however, no correlation between the use of TCM and the gender, age and educational background of the patients was found (14). Similar to literature, no correlation between the use of TCM and the gender, age and educational background of the patients was found in our study. Age and the status of using TCM methods can be evaluated more clearly in studies including more patients.

Zulkipli et al. found in the study in which they evaluated the use of TCM in newly diagnosed breast cancer patients diagnosed in Malesia that there was no correlation between TCM practice and the stage of cancer (15). Erku found in the study in which he evaluated the use of TCM and its effect on the quality of life in cancer patients receiving chemotherapy that patients using TCM were in the severe stage of cancer. As these patients were also educationally and economically more advanced, it was considered that it was more possible for them to find out TCM practices (16). In our study, there was no correlation between the use of TCM and the stage of cancer. More than half of the patients who were included in the study were in the severe stage of cancer and the educational background did not affect the use of TCM, which may result in that there was no significant correlation between the stage of cancer and TCM practice.

Ugurluer et al. found in the study in which TCM use of the patients who received treatment in an outpatient chemotherapy unit was evaluated that 90.6% of the patients who applied TCM methods used herbal products and that the most common one among these herbal products was urtica dioica (stinging nettle). The fact that it was easy to reach herbal treatments and that patients could find herbs such as urtiva dioica easily and for free increased this rate (17). Similar to literature, the most preferred TCM method by patients was phytotherapy with a rate of 59.1% in our study.

Sonmez et al. found in the study in which the status of using TCM in medical students was evaluated that there was no correlation between the income level and the use of TCM methods (18). Duzen et al. found in the study in which they evaluated TCM use in cancer patients that 49.7% of the patients spent less than 100 TL within a month (19). In our study, 45.5% of the patients spent more than 100 TL within a month. Most of the patients used phytotherapy and the cost of phytotherapy was low, which is consistent with the results. The fact that patients do not share their status of using TCM with their doctors and the low number of patients who tell that they use TCM prevent precise results.

Kessel et al. found in the study in which they investigated the use of TCM in oncology patients

that 42.1% of the patients applied TCM methods in order to boost their immune system, 33.3% to be sure that they used every opportunity against cancer, 25.7% to decrease the side effects of the treatment, 25.7% to get better, and 23.4% to increase the efficiency of oncologic treatment (20). In our study, 50% of the patients used TCM for fatigue, 36.4% for cancer treatment, and 13.6% for pain treatment. We think that our patients used TCM more to struggle against the symptoms as 54.1% of them were in the severe stage of cancer and received palliative care.

Dogu et al. found in the study in which they evaluated TCM use in cancer patients that 39.8% of the patients believed that they benefited from TCM when they used it together with the treatment they received (21). It was stated in the study of Yesil et al. on the patients with breast cancer that 32.9% of the patients highly benefited and 30% benefited while 18.6% slightly benefited from TCM practice. Leg pain and nausea were the stated side effects (22). In our study, 18.2% of the patients benefited from TCM practice while 45.5% partially benefited, and it was stated that 13.6% of the patients had gastrointestinal complaints.

Berretta et al. found in the study in which they investigated TCM methods in cancer patients that patients' source of information was media with a rate of 47.7%, friends with a rate of 19.2%, other patients with a rate of 11.9%, and doctors with a rate of 5.9% (23). In the study of Sonmez et al., 58.2% of the students who applied TCM did not inform their physicians about that (18). In our study, 13.6% (the lowest rate) of the patients got the information about TCM methods from their doctors, which is similar to literature. According to the results, 21.4% of the patients who consulted their doctors stated that the doctor did not approve their use of TCM. We think that when the physicians increase their level of information and decrease their negative reactions to TCM, patients will give more information about their status of using TCM to their doctors and possible positive or negative effects of TCM practice and interactions between the drugs and the practice will be able to be controlled. In our study, 63.6% of the patients who used TCM consulted their doctors before they started. We consider that including patients and their relatives into the process of treatment in biopsychosocial patient approach in palliative care increases this rate.

Although there is an improvement in treatment opportunities in medicine every day, it impossible to say that these treatment opportunities provide 100% cure. At the center of the treatment, there is a patient who is in need of help. Palliative medicine is a medical discipline that targets a qualified life for patients who are spending their last days (24). In palliative medicine, non-pharmacologic treatments as well as pharmacotherapies are known.

The first limitation of our study was that clinical conditions of the patients in the wards were severe and that we had a limited number of consents due to the patients' psychosocial conditions and could not receive sufficient answers from the patients who gave consent. Second limitation was that our study was monocenter.

It is inevitable that cancer patients in need of palliative care will increase in the upcoming period. When the fact that the possibility of these patients to apply TCM methods is always a possibility is considered, it is crucial to know patients' status of TCM use within the process when they are receiving treatment. We think that when the physicians are equipped with the sufficient information about the possible positive and negative results and contraindications of TCM methods and strengthen their communication with patients, the patients will be able give more information about their status of using TCM to their physicians and therefore, the side effects of TCM will decrease and patients' quality of life will increase.

REFERENCES

1. WHO. Definition of palliative care [Internet]. https://www.who.int/cancer/palliative/definition/en/ (accessed 22.12.2018)
2. Parkin DM. Global cancer statistics in the year 2000. Lancet Oncol 2001;2(9):533-43.
3. Ferrell BR, Temel JS, Temin S, et al. Integration of palliative care into standard oncology care: american society of clinical oncology clinical practice guideline update. J Clin Oncol 2017;35(1):96-112.
4. Öğütle VS, Sarımuratoğlu D. Modern onkolog hekimin geleneksel tıp uygulamaları karşısındaki stratejileri. SAD 2018;21(2):180-209.
5. WHO. General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine [Internet] https://apps.who.int/medicinedocs/pdf/whozip42e/whozip42e.pdf. (accessed 29.08.2019)
6. Ünal M, Dağdeviren HN. Geleneksel ve tamamlayıcı tıp yöntemleri. Euras J Fam Med 2019;8(1):1-9.
7. Şahin S. Geleneksel, tamamlayıcı, alternatif tıp uygulamalarına genel bir bakış. Türk Aile Hek Derg 2017; 21(4): 159-62
8. T.C. Sağlık Bakanlığı. Geleneksel ve Tamamlayıcı Tıp Uygulamaları ve İlgili Mevzuat. [Internet] https://dosyamerkez.saglik.gov.tr/Eklenti/27552,mevzuat-trpdf.pdf?0. (accessed 14.09.2019)
9. Teskereci G, Kulakaç Ö. Kanserde aromaterapi masajı: Sistematik literatür incelemesi. FNJN 2018;26(2):115-30.

10. Öztürk R, Şatır DG, Sevil Ü. Jinekolojik kanserli hastaların tamamlayıcı ve alternatif tedavi kullanım durumları ve tutumlarının incelenmesi. Gaziantep Med J 2016;22(3):141-7.
11. Gras M, Vallard A, Brosse C, et al. Use of complementary and alternative medicines among cancer patients: A single-center study. Oncology (2019):1-8.
12. Kaya İslamoğlu ZG, Demirbaş A, et al. Psöriaziste tamamlayıcı ve alternatif tıp yöntemleri kullanımı ve beslenmeyle olan ilişki: Bir anket çalışması. Genel Tıp Derg 2019; 29(1):7-13.
13. Akçay D, Yıldırımlar A. Çocuklarda tamamlayıcı ve alternatif tedavi kullanımı ve ebeveyn bilgilerinin değerlendirilmesi. Çocuk Dergisi 2017;17(4):174-81.
14. Sait KH, Anfinan NM, Eldeek B, et al. Perception of patients with cancer towards support management services and use of complementary alternative medicine – A single ınstitution hospital-based study in Saudi Arabia. Asian Pac J Cancer Prev 2014;15(6): 2547-54.
15. Zulkipli AF, Islam T, Taib NAM, et al. Use of complementary and alternative medicine among newly diagnosed breast cancer patients in Malaysia: An early report from the MyBCC Study. Integr. Cancer Ther 2018;17(2) 312-21.
16. Erku DA. Complementary and alternative medicine use and ıts association with quality of life among cancer patients receiving chemotherapy in Ethiopia: A cross-sectional study. eCAM 2016, Article ID 2809875.
17. Uğurluer G, Karahan A, Edirne T, et al. Ayaktan kemoterapi ünitesinde tedavi alan hastaların tamamlayıcı ve alternatif tıp uygulamaklarına başvurma sıklığı ve nedenleri. Van Med J 2007;14(3):68-73.
18. Sönmez CI, Başer DA, Küçükdağ HN, et al. Tip fakültesi öğrencilerinin geleneksel ve tamamlayıcı tıp ile ilgili bilgi durumlarının ve davranışlarının değerlendirilmesi. Konuralp Med J 2018;10(3):276-81.
19. Düzen KÖ, Korkmaz M. Kanser hastalarında semptom kontrolü ve tamamlayıcı ve alternatif tıp kullanımı. DEUHFED 2015; 8(2),67-76.
20. Kessel KA, Lettner S , Kessel C, et al. Use of complementary and alternative medicine (CAM) as part of the oncological treatment: Survey about patients' attitude towards CAM in a university-based oncology center in Germany. PLoS One. 2016;11:e0165801.
21. Doğu GG, Kargı A, Tanrıverdi O, et al. Complementary/alternative medicine experience in cancer patients: A Questionnaire-based survey. UHOD 2014;24(1):45-53.
22. Yeşil H, Kıran B, Alkan H,et al. Afyon Kocatepe Üniversitesi'nde meme kanseri tanısı ile takip edilmekte olan hastalarda tamamlayıcı ve alternatif tedavi kullanımı. Kocatepe Med J 2018; 19(2): 42-7.
23. Berretta M, Pepa CD, Tralongo P, et al. Use of complementary and alternative medicine (CAM) in cancer patients: An Italian multicenter survey. Oncotarget 2017;8(15):24401-14.
24. Özkaya H, İlkılıç İ. Tıbbi, hukuki, manevi ve etik boyutlarıyla palyatif tıp. In: İlkılıç İ, Özkaya H, Uçar A. Palyatif tıp uygulamalarında etik sorunlar.1st ed. İstanbul: İsar Yayınları, 2019; 77.