

## KNOWLEDGE AND USAGE RATE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE IN SCHOOL OF HEALTH SCIENCE STUDENTS

### SAĞLIK YÜKSEKOKULU ÖĞRENCİLERİNİN TAMAMLAYICI VE ALTERNATİF TIPI BİLME VE KULLANMA DURUMU

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#### ABSTRACT

This descriptive study was conducted to assess the knowledge and usage rate of CAM in School of Health Sciences students. This survey was carried out with 172 nursing students which were taking education during the summer term. The datas were collected with the questionnaire form that is prepared by the researchers based on literature. The questionnaire form consisted of items about sociodemographic characteristics, knowledge, usage rate and benefits situations of the CAM in the students. Datas were evaluated by using licensed SPSS 20. The majority of students evaluated that CAM methods are very important (60.5%) or important (6.4%) in eliminating health problems. CAM methods were found to be used mainly for relieving pain. The most known and used methods were praying and massage among female students. On the other hand, males more commonly used massage method compared to females. In conclusion, we recommend that CAM methods should be included in the curriculum of nursing and other health sciences education and that in-service training should be included to these issues.

**Keywords:** Alternative Medicine, Complementary Therapies, Nursing, Student

#### ÖZET

Bu tanımlayıcı çalışma Sağlık Yüksekokulu öğrencilerinin tamamlayıcı ve alternatif tıp (TAT)'ı bilme ve kullanma durumunu değerlendirmek için yapılmıştır. Çalışma yaz döneminde eğitim gören 172 hemşirelik öğrencisi ile yürütülmüştür. Veriler araştırmacılar tarafından literatüre dayalı hazırlanan veri toplama formu ile toplanmıştır. Veri toplama formu; sosyo-demografik özellikler, öğrencilerin TAT bilgisi, kullanma oranı ve yararlanma durumları hakkındaki sorulardan oluşmaktadır. Veriler lisanslı SPSS 20 istatistik programı ile değerlendirilmiştir. Öğrencilerin büyük çoğunluğu TAT yöntemlerini sağlık problemlerini ortadan kaldırma yönünden çok önemli (%60,5) ve önemli (%6,4) olarak değerlendirmiştir. TAT yöntemlerinin en çok ağrıyı azaltmada kullanıldığı bulunmuştur. Özellikle kız öğrenciler arasında en çok bilinen ve kullanılan yöntem; dua etme ve masaj olarak belirtilirken; erkek öğrenciler tarafından ise masaj yöntemi belirtilmiştir. Sonuç olarak; TAT yöntemleri hemşirelik ve diğer sağlık bilimleri öğrencilerinin eğitim müfredatında yer almalı ve hizmet içi eğitimlerde bu konulara yer verilmelidir.

**Anahtar Kelimeler:** Alternatif Tıp, Tamamlayıcı Terapiler, Hemşirelik, Öğrenci

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## INTRODUCTION AND AIM

Complementary and Alternative Medicine (CAM) is defined as the diagnostic, therapeutic and preventive practices which are not included conceptually under the topic of conventional medicine<sup>1,2</sup>. It represents a number of therapeutic approaches co-administered with or used instead of the fundamental medical treatment<sup>3</sup>.

American National Complementary/Alternative Medicine Center (NCCAM) is an organization working for the scientific research on complementary and alternative medicine and is one of the 27 institutes included in the American National Institutes of Health (NIH)<sup>4</sup>.

NCCAM has divided the CAM therapies into five categories as follows:

1. Alternative medical systems like homeopathy, traditional Chinese medicine and ayurvedic medicine
2. "Mind-body" techniques such as meditation, religious therapies, music and dance
3. Biologically-based therapies such as herbal treatments, vitamins, aromatherapy and specific diets
4. Musculoskeletal therapies such as manipulation and massage
5. Energy-based therapies such as qigong, reiki and magnetic field<sup>4</sup>.

The usage rate of CAM is increasing all over the world. The results of U.S. National Health Survey conducted by Disease Control and Prevention Center (CDC) and the National Center for Health Statistics (NCHS) in 2002-2007 suggest that about 38% and 12% of adults (aged 18 years and over) and children were using CAM therapies in U.S. in 2007<sup>5</sup>. In addition, adult U.S. population has been reported to spend 33.9 billion dollars for purchasing CAM products and materials as well as for visiting the CAM practitioners in 2007<sup>6</sup>. The 1-year and lifetime prevalence of the usage rate of CAM was 41.1% and 51.8% respectively in the U.K., (7) while the 1-year prevalence was

found to be 38.5% for the Indian population living in South America<sup>8</sup>. With regard to the usage rate of CAM among cancer patients in China, 93.4% of the patients have reported that they had used CAM from time to time and 71.7% reported that they were satisfied with the use of CAM<sup>9</sup>.

The generalizable studies on the prevalence of usage of CAM in Turkey are lacking. Previous studies have mainly focused on a particular group of patients or are limited to regional studies. In a literature review of the use of CAM among cancer patients<sup>10</sup>, the authors have reviewed 14 research articles published as scientific papers and results of 7 studies presented in national congresses in 2001-2007 and found the usage rate of CAM in Turkey to vary between 22.1% and 84.1%. The most commonly used method of CAM was use of a mixture of plants (most commonly, the "stinging nettle"). The factors associated with the usage rate of CAM were the gender, duration of disease, advanced stages of cancer, socio-economic status and educational level. In another study assessing the use of CAM in Eskisehir by random sampling method, 60% of the respondents have been found to use various CAM methods previously and the authors have concluded that accessibility and cost of the health services have a significant impact on the overall usage rate of CAM<sup>11</sup>.

Although the evidence exists to support the effectiveness of CAM therapies<sup>12,13</sup>, some methods need to be further studied<sup>14,15</sup>. There are some commonly used CAM methods which are not supported by scientific researches and may have serious side effects<sup>16-18</sup> and may represent a great threat to the human health<sup>9,19</sup>.

The declaration of Traditional Medicine Strategy issued in 2002-2005 by World Health Organization (WHO) noticed the importance of the use of CAM methods in a safe, rational, effective and legal manner<sup>19</sup>.

At this point, health care team has a key role in the practice of CAM therapies and in determination of the appropriateness of the CAM methods to the scientific evidence. Particularly, the nurses working in all areas of the community should have accurate and adequate knowledge about CAM methods to ensure the safe and effective use of CAM therapies and to prevent the potential side effects. For this purpose, topic of CAM

methods should be included in the curriculum of nursing education with informing the nursing students to encourage only the evidence-based CAM practices.

The present study was conducted to assess the usage rate and knowledge about CAM methods among school of health sciences students.

## MATERIAL AND METHOD

### Study Design

The research was organized as a descriptive study. The study was conducted to assess the knowledge and usage rate of CAM in School of Health Sciences students.

### Setting and Sample

This survey was carried out between August 19 and August 24, 2013, with nursing students taking courses during the summer term in a School of Health Sciences. The study sample included 172 students who agreed to participate in the study among a total of 210 nursing students studying in a School of Health Sciences.

### Measurements/Instruments

The datas were collected with the questionnaire form that is prepared by the researchers based on literature<sup>5,7,8</sup>. The questionnaire form consisted of items about socio-demographic characteristics (17-items), attitudes toward CAM (8-items), and knowledge level, usage rate and benefits of CAM methods (30-items). The survey

questions were developed by the researchers<sup>5,7,8</sup>, validity and reliability of them has not been.

### Ethical Consideration

The required permissions were obtained from the school administration before the data collection phase.

### Data Collection/Procedure

Before distributing the questionnaire form, researchers informed the students about the aim and methodology of the study. After obtaining informed consent, the questionnaire forms were filled out by the students in approximately 30 minutes.

### Data analysis

Data were evaluated by using licensed IBM SPSS Statistics 21. Descriptive statistical methods (numbers and percentage) were used for the analysis of the data. The relationships between categorical variables were determined by chi-square analyses. The *p* value less than 0.05 was accepted as significant level.

## RESULTS AND DISCUSSION

44.4% of the students were between 21 and 23 years old, 68.0% were female, 41.9% were on their third educational year and 57.0% were born at city center. The family type of the students was nuclear type (84.9%) and the family income of them was moderate

(59.3%) (Table 1). The majority of the student's mothers were housewives, only 16.3% of the mothers were working in a paid job. On the other hand, one of the fathers was unemployed.

**Table 1.** Main Socio-Demographic Characteristics of The Students

Age (year)	N	%	Family Type	N	%
18-20	6	44.2	Nuclear	146	84.9
21-23	77	44.8	Extended family	19	11.0
24-26	17	9.9	Fragmented	7	4.1
27-29	0	0.0			
30 and over	2	1.2			
<b>Gender</b>	<b>117</b>	<b>68.0</b>	<b>Family Income</b>		
Female	5	32	Very poor	4	2.3
Male	5	.0	Poor	6	3.5
<b>Birthplace</b>			Moderate	102	59.3
Village	18	10.5	Good	57	33.1
County/town	56	32.6	Very good	3	1.7
City center	98	57.0	<b>Total</b>	<b>172</b>	<b>100.0</b>

The answers of the question about primary CAM methods used by the students for health problems were to refer to a health care system (40.7%) and to go to the doctor if the health problem persists (24.4%) (Table 2).

**Table 2.** The Methods of The Students In Experiencing Health Problems And The Importance of CAM Methods For Students and Their Families In Terms of Preventing or Eliminating Health Problems

	N	%
<b>The Methods of the Students in Experiencing Health Problems</b>		
I refer to a healthcare center	70	40.7
I use drugs at home	21	12.2
I consider the recommendations of spouses, relatives and/or friends	5	2.9
I use traditional methods	5	2.9
I wait until it heal spontaneously	29	16.9
I go to the doctor if the health problem persists	42	24.4
<b>The Importance of CAM Methods for Students in Terms of Preventing or Eliminating Health Problems</b>		
Not important	57	33.1
Important	104	60.5
Very important	11	6.4
<b>The Importance of CAM Methods for the families of Students in terms of preventing or Eliminating Health Problems</b>		
Not important	45	26.2
Important	105	61.0
Very important	22	12.8
<b>TOTAL</b>	<b>172</b>	<b>100.0</b>

The reason of students to use CAM methods were to relive pain (48.3%), to consider CAM methods as effective and safe (46.5) and to prevent diseases (45.3%) (Table 3). The source of information of the students

(n=97) about CAM methods was the internet (56.4%), friends/relatives/family (43%), physicians (44.2%), book/magazine/newspaper (39%) and nurses (37.2%) respectively.

**Table 3.** Reason of Students To Use CAM Methods\*

	N	%
To relieve pain	83	48.3
To consider CAM methods as effective and safe	80	46.5
To prevent diseases	78	45.3
As a last choice/expectation	36	20.9
To resolve concerns	28	16.3
To do everything possible to fight with the disease	28	16.3
To eliminate the side effects of drugs	20	11.6
Because of curiosity	19	11.0
To provide physical comfort	18	10.5
To strengthen the muscles	14	8.1
Because of the recommendation of the physician	26	15.1
Because of the recommendation of the nurse	18	10.5
Because of the recommendation/insistence of the family members	26	15.1
Because of the recommendation of the friends/neighbors	16	9.3
Because I do not trust health personnel	15	8.7
Because I'm not satisfied with medical treatment	13	7.6
To improve the outcomes of the surgery	12	7.0
Because of the financial constraints	11	6.4
Because of the difficulty to access healthcare centers	8	4.7

\*Students gave more than one answer to the questions about the reasons to use complementary and alternative medicine (CAM) (n=172)

75.6% of the students said that CAM therapies can delay the initiation of the appropriate medical treatment and 58.7%

said CAM methods should be used only as the last choice when the medical treatment fails (Table 4).

**Table 4.** Students' Opinions About CAM Therapies

	N	%
To relieve pain	83	48.3
To consider CAM methods as effective and safe	80	46.5
To prevent diseases	78	45.3
As a last choice/expectation	36	20.9
To resolve concerns	28	16.3
To do everything possible to fight with the disease	28	16.3
To eliminate the side effects of drugs	20	11.6
Because of curiosity	19	11.0
To provide physical comfort	18	10.5
To strengthen the muscles	14	8.1
Because of the recommendation of the physician	26	15.1
Because of the recommendation of the nurse	18	10.5
Because of the recommendation/insistence of the family members	26	15.1
Because of the recommendation of the friends/neighbors	16	9.3
Because I do not trust health personnel	15	8.7
Because I'm not satisfied with medical treatment	13	7.6
To improve the outcomes of the surgery	12	7.0
Because of the financial constraints	11	6.4
Because of the difficulty to access healthcare centers	8	4.7

The data on complementary and alternative treatments known and used by the students (n=172) were in accordance with the

American UATTM classification. The most known methods were praying (86.0%) among the mind-body techniques, massage

(91.3%) among the manipulative and body-based methods, nutritional therapy and supplements (79.1%) among the biologically based therapies, bioenergy (36.6%) among

the energy-based therapies, and acupuncture (58.1%) among the alternative medical systems (Table 5).

**Table 5.** Usage Rate And Knowledge About CAM Methods of the Students

		Knowledge				Usage			
		Yes		No		Yes		No	
		N	%	N	%	N	%	N	%
<b>Mind-body techniques</b>	<b>Yoga</b>	81	47.1	91	52.9	17	9.9	155	90.1
	<b>Relaxation techniques</b>	130	75.6	42	24.4	102	59.3	70	40.7
	<b>Imagination</b>	141	82.0	31	18.0	113	65.7	59	34.3
	<b>Biofeedback</b>	52	30.2	120	69.8	38	22.1	134	77.9
	<b>Self-care</b>	141	82.0	31	18.0	115	66.9	57	33.1
	<b>Praying</b>	148	86.0	24	14.0	138	80.2	34	19.8
	<b>Meditation</b>	62	36.0	110	64.0	37	21.5	135	78.5
	<b>Breathing exercises</b>	121	70.3	51	29.7	93	54.1	79	45.9
	<b>Music therapy</b>	130	75.6	42	24.4	103	59.9	69	40.1
	<b>Hypnosis</b>	62	36.0	110	64.0	13	7.6	159	92.4
<b>Art therapy</b>	28	16.3	144	83.7	18	10.5	154	89.5	
<b>Manipulative and Body-Based Methods</b>	<b>Massage</b>	157	91.3	15	8.7	140	81.4	32	18.6
	<b>Chiropractic</b>	16	9.3	156	90.7	8	4.7	164	95.3
	<b>Osteopathy</b>	22	12.8	150	87.2	14	8.1	158	91.9
	<b>Hydrotherapy</b>	135	78.5	37	21.5	91	52.9	81	47.1
	<b>Cupping</b>	70	40.7	102	59.3	37	21.5	135	78.5
<b>Color Therapy</b>	16	9.3	156	90.7	7	4.1	165	95.9	
<b>Biologically based therapies</b>	<b>Herbal treatments</b>	133	77.3	39	22.7	99	57.6	73	42.4
	<b>Nutritional Therapy and Supplements</b>	136	79.1	36	20.9	70	40.7	102	59.3
	<b>Neural Therapy</b>	25	14.5	147	85.5	6	3.5	166	96.5
<b>Energy-based therapies</b>	<b>Aromatherapy</b>	43	25.0	129	75.0	18	10.5	154	89.5
	<b>Bioenergy</b>	63	36.6	109	63.4	33	19.2	139	80.8
	<b>Magnetic field</b>	17	9.9	155	90.1	5	2.9	167	97.1
<b>Alternative medical systems</b>	<b>Qi-gong</b>	14	8.1	158	91.9	7	4.1	165	95.9
	<b>Acupuncture</b>	100	58.1	72	41.9	11	6.4	161	93.6
	<b>Homeopathy</b>	14	8.1	158	91.9	8	4.7	164	95.3
	<b>Naturopathy</b>	52	30.2	120	69.8	36	20.9	136	79.1

Among the CAM methods, knowledge about praying significantly differed between the genders and females were found to have more knowledge about praying compared to males ( $p < 0.05$ ). Knowledge about herbal treatments also significantly differed between the genders and females were found to have more knowledge about herbal treatments compared to males ( $p < 0.01$ ).

Among the CAM methods, usage rate of massage significantly differed between the genders, and males were found to use the massage more commonly than females ( $p < 0.05$ ). Usage rate of listening to music and music therapy also significantly differed between the genders, and students living in private dormitories were found to use this

kind of therapy more commonly than other students ( $p < 0.01$ ).

Professional nursing is an important scientific field to improve healthcare by using the evidence-based CAM methods as well as by raising the awareness about CAM methods among nurses and by exhibiting consistent behavior on this issue. Almost half of nursing education institutions define CAM methods within their curriculum<sup>20</sup>. Many previous studies carried out on nursing students and in nursing faculties have demonstrated that nursing students largely have positive attitudes toward CAM methods and are interested to learn more about such therapies<sup>21-23</sup>. In the study of Feldman and Laura on students taking education in

university on psychology, education and nursing, 81.1% of the students were found to use at least one CAM method<sup>24</sup>. Sawalha et al. have investigated the usage rate of herbal treatments among university students and 33.9% of students were found to prefer to use such therapies<sup>25</sup>. On the other hand, Greenfield et al. have suggested the usage of CAM methods to have a significant role among medical students (in 69%) in terms of providing health care<sup>26</sup>. Chaterji et al. have also reported that students were considering the CAM methods as useful therapeutic approaches as well as were considering that CAM methods should be included in the curriculum and that health professionals should take the CAM methods into account for the care of patients<sup>27</sup>. The same authors also found that students had a positive attitude for CAM methods and were interested to learn more about these therapy methods<sup>27</sup>. In the present study, CAM was found to be very important for 60.5% and to be important for 1.2% of the students in terms of eliminating health problems (Table 2).

Harris et al. have reported that 80% of the students were considering that CAM therapies should be parallel to the conventional treatment methods and 88% were considering that CAM therapies can be recommended as therapeutic approaches<sup>28</sup>. In the present study, 40% of the students were referring to a healthcare center for health problems, 60.5% were considering the CAM therapies to be important to prevent or eliminate diseases and 61.0% reported that CAM therapies were considered as important by their families (Table 2). Similarly, Freymann et al. have reported in their study that family members have a key role in getting information about and in having a tendency to use the CAM methods among students<sup>29</sup>. In the present study, 58.7% of the students regarded the alternative treatment methods as the last choice when medical treatment fails, 70.3% stated that alternative methods of treatment should be used only for

simple illnesses and it should not be used for serious illnesses, and 51.2% considered that CAM may be recommended to the people other than patients (Table 4). Feldman and Laura have reported that students used CAM methods most commonly for headache (62.4%), upper respiratory tract infection (59%) and stress (57.6%)<sup>24</sup>. In addition, a great proportion of the students used CAM methods in order to improve quality of life, to reduce the complications of disease and to provide an integrative care. Johnson and Blanchard found in their study that CAM therapies were largely used for the treatment of influenza, pain due to the musculoskeletal diseases and pseudoneurological diseases<sup>30</sup>. On the other hand, Camurdan and Gul have reported CAM therapies to be used most commonly for common cold, abdominal pain, headache, stress and insomnia. In the present study, the most common reasons to use CAM methods were to relieve the pain in 48.3% and due to the difficulty to access a health care center in 4.7% of the students (Table 3)<sup>31</sup>.

Although it has been reported by Harris et al. that students had obtained the information about CAM from the pharmaceuticals and other journals and from the professionals in their expertise areas<sup>28</sup>, Sawalha et al. have found that majority of the students were using herbal treatments based on their own knowledge or on the practices learned from friends/family and that a small group of students had obtained the information about CAM methods from the media and marketing departments<sup>25</sup>. Owen et al. have reported the main sources of information about CAM methods as the society, internet, magazines and books<sup>32</sup>. On the other hand, the main source of information was magazines/books in the study of Camurdan and Gul<sup>31</sup>. In the present study, students had obtained this information from internet (56.4%), friends/relatives/family (43%), physicians (44.2%), book/magazine/newspaper (39%) and nurses (37.2%).

Harris et al. have reported that the major obstacles against the use of CAM therapies include insufficient scientific evidences about the effectiveness of CAM in treating the symptoms of disease (85%), lack of documents relevant to the use of CAM methods (80%), lack of legal regulations (65%) and lack of skilled staff on CAM methods (75%)<sup>28</sup>. On the other hand, in the study of Feldman and Laura, major reasons for not using CAM therapies were the fact that CAM therapies were not covered by health insurance (32.7%), the high cost (27.6%), insufficient scientific evidence about CAM therapies (22.4%), inability to access the CAM practitioners (19.4%), distrust to CAM methods (20.4%) and feeling no need for CAM methods (14.3%)<sup>24</sup>. In the present study, nursing students stated that CAM therapies can delay initiation of the appropriate medical treatment (75.6%), CAM methods should be used only as the last choice when the medical treatment fails (58.7%), alternative methods of treatment should not be used before consulting a physician (73.8%), more scientific evidence are needed before using the alternative treatment methods as a therapeutic approach (73.3%), and CAM therapies may be recommended to the patients receiving care (70.3%) (Table 4). Chaterji al. have also reported the major obstacles to use CAM therapies as the insufficient evidences and lack of knowledge, in-service training and equipment<sup>27</sup>.

In the study, 43% of the students have reported that they had use at least one CAM method over the last year (mostly aromatherapy and herbal treatments)<sup>29</sup>. Feldman and Laura have found that the most commonly used CAM method by the students was relaxation techniques (41.7%), followed by massages (38.2%), herbal treatment (37.3%), art therapy (32.2%), music therapy (29.5%), and lifestyle changes including diet (22.6%), meditation (22.6%), imagination (18.1%) and cryotherapy

(13.9%)<sup>29</sup>. On the other hand, students included in the study of Harris et al. have stated that the potential beneficial CAM methods are cryotherapy (>50%), nutrients and massage (38%), herbal treatments (28%), biofeedback (18%), hypnosis (13%) and meditation (8%)<sup>28</sup>. Sawalha et al., it has been found that students were using herbal treatments most commonly for headache, influenza, sore throat and menstrual pain<sup>25</sup>. On the other hand, Johnson and Blanchard have investigated the CAM methods used by the students over the last year and found that most commonly used methods were massage therapy (22.9%), yoga (18.4%), relaxation techniques (18%), aromatherapy (14.8%), megavitamins (12.3%), chiropractic (10.5%), healthy diet habits (9.4%) and spiritual methods (6.8%) and less commonly used methods were homeopathy, light therapy, magnetic field, energy techniques and reflexology<sup>30</sup>. Greenfield et al. have found that medical students mostly lean towards the cryopractic among CAM methods<sup>26</sup>. In the study of Pratt, students were found to most commonly use the breathing exercises, yoga, massage and pilates<sup>33</sup>. Camurdan and Gulhave reported the most commonly used methods as herbal treatments, hot and cold applications and massage. In the present study, the best known and mostly used mind-body techniques among nursing students were praying, imagination, music therapy, relaxation techniques, breathing exercises and less commonly were the yoga, meditation, hypnosis, biofeedback and art therapy<sup>31</sup>. The best known and mostly used methods were massage, hydrotherapy, cupping, osteopathy, chiropractic and color therapy among the manipulative and body based methods; nutritional therapy and supplements, herbal treatments, aromatherapy and neural therapy among the biologically based therapies; bioenergy, magnetic field and qi-gong among the energy based therapies; and acupuncture, naturopathy and homeopathy among the alternative medical systems (Table 5). Many

previous studies have reported that students know or informed about CAM methods<sup>31</sup>.

In addition, in the present study, female students had more knowledge about the praying and herbal treatments compared to the males, while males had more knowledge on the massage therapy compared to the females. Many previous studies have suggested that females more commonly regard and use CAM methods than males<sup>24, 26, 27</sup>. This was explained by the emotional and spiritual nature as well as the tendency to use the traditional methods among females<sup>34</sup>. Predominance of males in using the massage therapy may be attributed to the facts that males are more interested in sports and want to increase muscle strength and that females cannot allocate time to the massage because of the high load of housework<sup>35</sup>. In addition, in the present study, students living in private dormitories were using the music therapy more than other students, which may be resulted from easier access to the music through the internet free of charge and from the availability of separate rooms making the music to be listened without difficulty. Chaterji et al. found that students in the 2<sup>nd</sup> class had more positive opinions and more commonly used CAM methods compared to the 1<sup>st</sup> class students<sup>27</sup>, while it was applied to the 3<sup>rd</sup> and 4<sup>th</sup> class students compared to

the 2<sup>nd</sup> class students in the study of Camurdan and Gul<sup>31</sup>. On the other hand, in the study of Freymann et al. students in the 3<sup>rd</sup> and 4<sup>th</sup> class had more concern about CAM methods compared to the 1<sup>st</sup> and 2<sup>nd</sup> class students<sup>29</sup>. In the present study, there was no difference in knowledge level and usage rate of CAM methods between the student classes. This can be attributed to the fact that no information is given in our school about CAM methods and that these treatment modalities are not included in the curriculum.

Many previous studies have demonstrated that health professionals and students are willing to get knowledge<sup>27, 29, 32</sup>. It is important to include the CAM methods in the curriculum of the nursing education<sup>36</sup>. Camurdan and Gul have reported that students demand the massage, meditation, aromatherapy, hypnosis and reflexology to be included in the curriculum<sup>31</sup>. Many schools in U.S. include the CAM methods in the curriculum of nursing education<sup>37</sup>. Because CAM methods are commonly used in our country, health professionals should be informed about CAM methods. By this means, the use of evidence-based CAM methods can be supported, while potential harmful practices should be avoided.

## CONCLUSION AND RECOMMENDATIONS

In conclusion, the majority of students stated that CAM methods are very important in eliminating health problems. The most known methods were praying and massage. In the light of all these data, we recommend that all CAM methods should be included in

the curriculum in schools giving education to nursing students and other health professionals and that in-service training should be provided to the graduates from health sciences.

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