

ATTITUDES AND PRACTICES OF NURSING STUDENTS REGARDING COMPLEMENTARY AND SUPPORTIVE PRACTICES

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Abstract

This study aims to determine the attitudes and practices of nursing students regarding complementary and supportive practices. A cross-sectional research design was used to collect data. The study was conducted with 335 nursing students studying at a university in Turkey between July and August 2021. "Personal Information Form" and "Attitude Towards Using Complementary Treatments Scale" were used to collect study data. It was determined that 89.3% of the participants stated that they wanted complementary and supportive practices to be included in the nursing curriculum. 94.6% of the participants were considering using these practices while giving care in the future. Attitude towards using complementary and supportive practices scores were found to be 24.77 ± 6.19 . Attitude mean score of those who have a mother's education level at secondary school, who smoke, and who plan to use complementary and supportive practices for the patient group they will care for in the future were found to be higher ($p < 0.05$). The attitude of the participants regarding using complementary and supportive practices is positive, and the mean score is at a moderate level. It is of great importance to increase the knowledge and awareness of students about such practices by including complementary and supportive practices in the nursing undergraduate curriculum.

Keywords: Attitude; Complementary therapies; Nurse; Nursing students

HEMŞİRELİK ÖĞRENCİLERİNİN TAMAMLAYICI VE DESTEKLEYİCİ UYGULAMALARA YÖNELİK TUTUM VE UYGULAMALARI

Öz

Hemşirelik öğrencilerinin tamamlayıcı ve destekleyici uygulamalara yönelik tutum ve uygulama durumlarını belirlemek amaçlandı. Çalışmada kesitsel araştırma desenindedir. Çalışma Türkiye’de bir üniversitede öğrenim gören 335 hemşirelik öğrencisi ile Temmuz- Ağustos 2021 tarihleri arasında yürütüldü. Verilerin toplanmasında "Kişisel Bilgi Formu" ve "Tamamlayıcı Tedavileri Kullanmaya Yönelik Tutum Ölçeği" kullanıldı. Katılımcıların %89.3’ü tamamlayıcı ve destekleyici uygulamaların hemşirelik müfredatında olmasını istediklerini belirtti. Katılımcıların %94.6’sının ileride bakım verecekleri kişilere bu uygulamaları kullanmayı düşündüğü saptandı. Tamamlayıcı ve destekleyici uygulamaları kullanmaya yönelik tutum puanları 24.77 ± 6.19 olarak belirlendi. Anne eğitim düzeyi ortaokul olanların, sigara kullanan ve ileride bakım verecekleri hasta grubuna tamamlayıcı ve destekleyici uygulamaları kullanmayı düşünenlerin tutum puan ortalamaları daha yüksek bulundu ($p < 0.05$). Katılımcıların tamamlayıcı ve destekleyici uygulamaları kullanmaya yönelik tutumu olumlu yönde ve puan ortalaması orta düzeydedir. Tamamlayıcı ve destekleyici uygulamaların hemşirelik lisans müfredatından itibaren yer alarak öğrencilerin bu tür uygulamalara yönelik bilgi düzeylerinin ve farkındalıklarının artması büyük önem taşımaktadır.

Anahtar Kelimeler: Tutum; Tamamlayıcı terapiler; Hemşire; Hemşirelik Öğrencileri

1. INTRODUCTION

Complementary and supportive practices called 'integrative medicine,' which emphasize the bio-psycho-socio-spiritual dimensions of individuals, are among the practices that meet the basic health care needs of individuals for centuries and are used together with medical treatments in health care practices (1). There is an increasing interest in complementary and supportive practices among the general population and healthcare professionals (2,3).

Complementary and supportive practices can be divided into five categories: Mind-body interventions (pilates, yoga, hypnosis, meditation, prayer, etc.), Manipulative and body-based methods (exercise, massage, hydrotherapy, reflexology, etc.), energy therapies (healing touch and reiki), alternative medical systems (Traditional Chinese Medicine, acupuncture, etc.), and biologically based treatments (herbal therapy, special diets, vitamins) (4,5). In Turkey, the Regulation on Traditional and Complementary Medicine Practices was published in the Official Gazette dated 27 October 2014 and numbered 29158, and 15 traditional complementary alternative medicine practices were defined (Apitherapy, Acupuncture, Phytotherapy, Leech therapy (Hirudotherapy), Hypnosis, Homeopathy, Chiropractic, Maggot therapy, Cupping, Mesotherapy, Osteopathy, Prolotherapy, Ozone therapy, Reflexology, and Music therapy) (6).

While the frequency of use of complementary and supportive practices in the world vary between 9-76% (7), it is stated that this frequency is approximately 60.5% in Turkey (8). It is stated that the reasons for using complementary and supportive practices are to assume that medical treatment is reinforced by traditional and complementary medicine, to be more cost-effective than medical treatment, and to strengthen the body defense system (9).

Nurses have an important role in explaining the purpose, effect, and use of complementary and supportive practices to individuals, in the monitoring and evaluation of the practices (2). Nurses occupy an important position among health professionals in terms of integrating complementary and supportive practices into medical treatment protocols, communicating with individuals receiving care, and providing information about these practice (1). Accordingly, nurses are expected to plan and develop nursing interventions regarding complementary and supportive practices, determine effective strategies, and guide individuals in terms of using complementary and supportive practices correctly and effectively (3).

There are studies on the attitudes and beliefs of university students who are prospective health care professionals, such as nursing, midwifery, and medical school students, towards complementary and supportive practices (2,4,10-18). In the results of the studies, the students reported that they often use complementary and supportive practices to reduce stress, eliminate health problems and hair-face care (4) and it would be beneficial to use these practices and recommend them to patients in the future (13). They frequently stated the sources of information about these practices as the internet, health personnel, and their friends (4) and they stated that these practices should be integrated into both the clinic and the nursing curriculum (10,15). Students' attitudes towards complementary and supportive practices may affect their use of these practices in the future and their recommendation to patient groups that they will provide care. As the level of attitudes towards complementary and supportive practices increases positively, the possibility of recommending and applying these practices to the patient groups they will care for in the future increases (15).

Nurses have an important role in the protection and development of health, and it is important to determine the necessary behaviors and attitudes of nurses regarding complementary and supportive practices in addition to and support medical treatments, starting from the education period. In the institution where the sample is located, there is no course related to complementary and supportive practices in the nursing curriculum. Therefore, this study is considered to be a decisive study to integrate the complementary and supportive practices into the nursing curriculum by determining students' attitudes on this subject and their ideas about adding it to the curriculum. Since it is

considered that students' attitudes towards complementary and supportive practices will affect their use, recommendation, and integration into nursing care, this study aimed to determine the attitudes and practices of nursing students regarding complementary and supportive practices.

2. MATERIALS AND METHODS

Study design: The study is cross-sectional and was carried out between July and August 2021. The research was reported with The Strengthening the Reporting of Observational Studies in Epidemiology Statement (STROBE) for cross-sectional studies.

Setting and Sample: The population of the study consisted of 738 students (1st grade:188, 2nd grade: 160, 3rd grade: 173, 4th grade:217) studying at the Faculty of Health Sciences, Nursing Department of a foundation-supported state university in Turkey in the 2020-2021. The sample size required for the study was calculated as at least 253 using the simple random sampling method formula ($n=Nt2pq/d2(N-1)+t2pq$). The weighting was made according to the number of registered students in classes, and it was planned to include 65 from the 1st grade, 55 from the 2nd grade, 59 from the 3rd grade, and 74 from the 4th grade. A total of 335 students who agreed to participate in the study were evaluated. All individuals aged 18 years and over who volunteered to participate in the study were included in the study. At the end of the study, the power of the study was calculated using a programme (G Power-3.1.9.2 software). As a result of the analysis applied to 335 people, the effect size was found to be 0.9615, $\alpha = 0.05$, and the power of the study, which was calculated as post-hoc, was calculated as 0.98.

Data Collection Tools: “Personal Information Form” and “Attitude towards Using Complementary Treatments Scale” were used to collect study data.

Personal Information Form: The personal information form created by the researcher by reviewing the literature (2,5,16,18-19). consisted of a total of 20 questions, including sociodemographic variables (age, gender, income, smoking status, class, education level of mother and father) and questions to determine the practice status of students towards complementary and supportive practices.

Attitude towards Using Complementary Treatments Scale: The scale was developed by Bilge et al. The Cronbach alpha value of the 13-item 4-point Likert-type scale is 0.79. When answering the questions, the participants will choose one of the following options: (0) strongly disagree, (1) slightly agree, (2) mostly agree, (3) strongly agree. Each item of the scale is scored between 0-3. The minimum score to be taken from the scale is 0, and the maximum score is 39. A high score from the scale indicates a positive attitude towards complementary treatments (20). In this study, the Cronbach alpha value of the scale was calculated as 0.83.

Data Collection: The data collection tools of the study were created through Google forms, and the data were collected online by sending the link of the study to the students. Before answering the questionnaire questions, each participant declared that they read the informed consent form and agreed to participate in the study.

Data Analysis: Study data were analyzed using the SPSS (Statistical Package for Social Sciences for Windows 25.0) software. Descriptive statistical methods (percentage, number, mean, min-max values, and standard deviation) were used while evaluating the data. Skewness and Kurtosis values were used to determine the normal distribution of the data. Normal distribution was taken as reference according to skewness and kurtosis values being between ± 3 (21). In the comparison of quantitative data in normally distributed data, the independent t-test was used for the difference between two independent groups, and the one-way analysis of variance was used for the comparison of more than two independent groups. In case of a difference, the Bonferroni test was used to find the group that made a difference. Spearman correlation test was used to test the relationship between numerical variables.

Ethical Statement & Informed Consent: Before starting the study, ethical approval (reference number, 2021/249) from the Human Research Ethics Committee of the university where the study was conducted, institutional permission from the faculty management (2021/E-84252428605.01-2100065647), and scale usage permission from the author who developed the scale used in the study, were obtained. The study was conducted in accordance with the Declaration of Helsinki, and informed consent was obtained from the participants in accordance with the principle of voluntariness to participate in the study.

3. RESULTS

It was determined that the mean age of the participants was 20.92 ± 1.75 (min:18- max:32) years, 83% were women, 34.9% were second-grade students, 53.7% lived in the province, 46.9% of the participants' fathers were high school graduates or higher, 58.8% of the participants' mothers were primary school graduates or below, the income of 72.6% was equal to their expenses, 90.7% were non-smokers, and 89.3% did not have a chronic disease (Table 1).

Table 1. Sociodemographic Characteristics of the Participants (n=335)

Variables	n	%
Age		
20 years old or under	150	44.8
over 20 years old	185	55.2
Gender		
Female	278	83.0
Male	57	17.0
Grade		
1st Grade	73	21.8
2nd Grade	117	34.9
3rd Grade	68	20.3
4th Grade	77	23.0
Place of Residence		
Province	180	53.7
District	102	30.4
Village	53	15.9
Education Level of Father		
Primary school and below	108	32.2
Middle school	70	20.9
High school and higher	157	46.9
Education Level of Mother		
Primary school and below	179	58.8
Middle school	74	22.1
High school and higher	64	19.1
Income status		
Income less than expenses	51	15.2
Income equal to expenses	243	72.6
Income more than expenses	41	12.2
Smoking Status		
Smoker	31	9.3
Non-smoker	304	90.7
Presence of Chronic Disease		
Have a Chronic Disease	36	10.7
No Chronic Disease	299	89.3
Total	335	100.0

Regarding the complementary and supportive practices, 85.4% of the participants stated that they did not attend a training, congress, conference, or seminar on complementary and supportive practices, 89.3% wanted a course content on complementary and supportive practices in their undergraduate education, 89.3% did not use complementary and supportive practices, such practices were not used by the family members of 92.2%, and 90.4% obtained information about complementary and supportive practices via the Internet. It was observed that 94.6% of the participants considered using complementary and supportive practices in patient care processes (Table2).

Table 2. Characteristics Regarding Complementary and Supportive Practices (n=335)

Complementary and supportive practices	n	%
State of attendance at training, conference, seminar, congress, etc (n=335)		
Yes	49	14.6
No	286	85.4
State of demanding to have a course related to complementary and supportive practices in undergraduate education (n=335)		
Yes	299	89.3
No	36	10.7
State of using complementary and supportive practices (n=335)		
Yes	36	10.7
No	299	89.3
State of using complementary and supportive practices by any family member (n=335)		
Yes	26	7.8
No	309	92.2
Source of information* (n=967)		
Family	118	35.2
Relative	52	15.5
Friend	139	41.5
Internet	303	90.4
TV	106	31.6
Health employee	126	37.6
Course, seminar, congress	123	36.7
Intended use* (n=55)		
To reduce stress/anxiety	9	16.4
To fix health problems	30	54.5
To relieve fatigue	6	10.9
For hair and face care	4	7.3
For sleep problems	1	1.8
For weight control	5	9.1
Consideration of using complementary and supportive practices on the patient group you care for in the future		
Yes	317	94.6
No	18	5.4

* More than one answer has been marked.

The score the students got from the Attitude towards Using Complementary Treatments Scale was 24.77 ± 6.19 (min:1, max:39).

When Table 3 is examined, statistically significant differences were determined between the participants' attitudes towards using complementary therapies according to smoking status, their mothers' educational status, and the state of considering using complementary and supportive practices on the patient group to be cared for in the future. It was observed that the attitude scores of those whose mothers' education level at middle school level (26.07 ± 6.31) were higher compared to attitude scores of those whose mothers' education level at high school and higher (23.41 ± 7.19) ($p < 0.05$). It was determined that the effect size of this difference was $\eta^2 = 0.876$ and the difference had a larger effect.

Attitude scores of students who smoke (28.39 ± 6.40) were found to be significantly higher than those of non-smokers (24.40 ± 6.06) ($p < 0.001$). It was determined that the effect size of this difference was $d = 0.667$ and the difference had a medium effect. It was determined that the attitude scores of those who intend to use complementary and supportive treatments on the patient group to be cared for in the future (25.15 ± 5.76) are higher than those who do not (18.17 ± 9.37) ($p < 0.001$). It was determined that the effect size of this difference was $d = 0.961$ and the difference had larger effect.

Table 3. Comparison of the Scores of Attitudes Towards Using Complementary Treatments According to the Demographic Characteristics of The Participants (n=335)

Characteristics	Attitude Towards Using Complementary Treatments Scale
	$\bar{X} \pm SS$
Age	
20 years old or under	25.42 \pm 5.98
over 20 years old	24.24 \pm 6.32
t	1.735
p	0.084
Gender	
Female	24.68 \pm 6.08
Male	25.23 \pm 6.77
t	-0.612
p	0.541
Grade	
1st Grade	25.92 \pm 6.38
2nd Grade	23.91 \pm 6.01
3rd Grade	25.18 \pm 6.02
4th Grade	24.62 \pm 6.35
F	1.704
p	0.166
Place of Residence	
Province	24.58 \pm 6.55
District	25.40 \pm 6.33
Village	24.21 \pm 4.40
F	0.836
p	0.434
Education Level of Father	
Primary school and below	24.50 \pm 4.94
Middle school	23.51 \pm 7.05
High school and higher	25.52 \pm 6.48
F	2.709
p	0.068
Education Level of Mother	
Primary school and below	24.73 \pm 5.71
Middle school	26.07 \pm 6.31
High school and higher	23.41 \pm 7.19
F	3.225
p	0.041*
Bonferroni	2>3
Effect Size (η^2)	0.876
Income status	
Income less than expenses	24.90 \pm 5.40
Income equal to expenses	25.03 \pm 6.01
Income more than expenses	23.05 \pm 7.87
F	1.824
p	0.163
Smoking Status	
Smoker	28.39 \pm 6.40
Non-smoker	24.40 \pm 6.06

t	3.470
p	0.001*
Effect Size (d)	0.667
State of attendance at training, conference, seminar, congress, etc on complementary and supportive practices	
Yes	25.02±5.81
No	24.73±6.26
t	0.306
p	0.760
State of demanding to have a course related to complementary and supportive practices in undergraduate education	
Yes	24.88±5.75
No	23.83±9.11
t	0.961
p	0.337
State of using complementary and supportive practices before	
Yes	25.94±6.48
No	24.63±6.15
t	1.205
p	0.229
State of using complementary and supportive practices by any family member	
Yes	23.35±6.30
No	24.89±6.18
t	-1.222
p	0.223
Presence of Chronic Disease	
Have a Chronic Disease	25.94±6.94
No Chronic Disease	24.63±6.09
t	1.205
p	0.229
Consideration of using complementary and supportive practices on the patient group you care for in the future	
Yes	25.15±5.76
No	18.17±9.37
t	4.803
p	0.001*
Effect Size (d)	0.961

4. DISCUSSION

The attitudes and practices of nursing students regarding complementary and supportive practices were determined in this study. It was determined that the attitudes of the students towards using complementary therapies were positive, and their mean scores were at a moderate level. In a similar study, it was reported that the mean score of students from scale was 20.72 ± 7.09 , and their attitudes towards using complementary therapies were positive and moderate (19). In studies that determined the attitudes of nursing students towards complementary and supportive practices, it was reported that they showed a positive and moderate attitude (2,17). A previous study examining the attitudes of nursing and chiropractic students towards complementary and supportive practices determined that students studying in both departments had positive attitudes towards these practices (14). In another study conducted with senior nursing and midwifery students, it was reported that students showed positive attitudes towards complementary and supportive practices (15). When the results of previous studies were examined, it was determined that the attitudes of nursing, midwifery, and chiropractic students studying in health sciences towards complementary and supportive practices were positive and in line with the results of the present study.

According to the findings of the study, internet use is one of the primary sources of information of nursing students about complementary and supportive practices. Similar studies reported that written and visual media (19), websites (13), and Internet (17,22) are among the frequently used information sources. It is considered that students prefer to obtain information via the internet as it is a fast and easily accessible resource. It is expected that the Z generation, which is the digital generation, is intertwined with technology and accordingly uses digital technology as a source of problem-solving and information acquisition (23).

This study had determined that 14.6% of the students attended training, seminars, or congresses on complementary and supportive practices; however, 89.3% of the students wanted to have a course on complementary and supportive practices in the nursing curriculum. In similar studies, nursing and health sciences faculty students stated that complementary and supportive practices should be included in the curriculum (11, 15,17, 24). A study examining the status of complementary and supportive practices in the nursing curriculum across Europe stated that there are deficiencies in the nursing curriculum regarding complementary and supportive practices and that there is no consistent approach. It has been stated that nurses can be stronger in this field with the integration of complementary and supportive practices into the nursing curriculum (25). The fact that 14.6% of the students received training on these practices suggests that there may be a lack of knowledge about complementary and supportive practices. In addition, it was concluded that the reason for students' demanding the complementary and supportive practices to be included in the nursing curriculum was to eliminate their knowledge deficiencies.

Although 89.3% of the students and 92.2% of their families did not use any complementary and supportive practices, it was determined that 94.6% of the students were considering using complementary and supportive practices on the patient groups they would care for in the future. It was determined that students who used complementary and supportive practices used these practices for anxiety and weight management, reducing fatigue, eliminating health problems, and hair-face care. Sarimehmet et al. (2020) examined the knowledge and opinions of university students on complementary therapy practices, and it was determined that students preferred complementary and supportive practices for reducing stress, eliminating health problems, and hair-facial care (4). It was concluded that the students preferred complementary and supportive practices to relieve the symptoms they experienced in both physiological and psychological health problems.

When examined in terms of independent variables, it was determined that the level of mother's education, smoking status of the students, and the state of considering using complementary and supportive practices on the patient groups they will care for in the future affect the attitude scores. According to the study results; It has been determined that the attitude scores of the students who smoke are higher. In a study examining the use of complementary health approaches by female university students and the factors affecting them, it was stated that smokers use complementary and supportive practices more (26). It is thought that the attitudes of smokers towards complementary and supportive practices may be more positive due to reasons such as quitting smoking and minimizing the negative effects of smoking.

In this study, it was determined that the attitude scores of the students whose mother's education level is at the secondary school level are higher than the students whose mother's education level is high school and above. There are study findings indicating that students' maternal education status does not affect their attitudes towards complementary and supportive practices (2,17).

The results of the study show that the state of considering the use of complementary and supportive practices in the patient groups that they will care for in the future affects their attitude scores. In a similar study, it was determined that students who frequently recommend complementary and supportive practices to patients have a more positive approach than those who do not recommend them at all (15). It is considered that the reason why those with high attitude scores consider using or

recommending these practices in the patient groups they will care for in the future is because they believe in the effectiveness and usefulness of these practices.

In the study, it was determined that sociodemographic variables such as gender, class level, place of residence, father's education status, income status and having a chronic disease did not affect the students' attitude scores. In the study conducted by Aktaş; It was stated that attitude scores were not affected by variables such as gender, class, educational status of parents, place of residence, and socioeconomic status (2). Another study; while they stated that income status and place of residence did not affect the attitude levels, they reported that gender had an effect on the attitude. It was determined that the attitudes of female students were more positive than male students (15).

5. CONCLUSIONS

It was found that the attitudes of the nursing students included in the study towards complementary and supportive practices were positive and moderate. It was determined that the majority of the students did not participate in a scientific activity such as lectures, courses, seminars, and symposiums related to these practices before, but they believed that complementary and supportive practices should be included in the nursing curriculum. This result presents the view that the level of participation of students in scientific activities that will fill their knowledge deficiencies is low, so these practices should be added to the curriculum in undergraduate education and supported by evidence-based information and study results. It was determined that students who used complementary and supportive practices before used these practices to ensure both physiological and psychological well-being. It was determined that the level of family education, smoking status, and the state of considering using such practices on the patients in the future affected the attitude scores of the patients. It was determined that the students who will provide nursing care as professional members in the future believe that they intend to use complementary and supportive practices on the patient groups they will care for. In line with these results, it is considered that including course content supported by evidence-based study results in the nursing curriculum so that students can make more accurate and effective practices both about their own disease and health processes and the patients they will care for in the future, informing by organizing symposiums, seminars, and congresses, and since the internet is the most preferred information source, determining the media literacy levels of the students to enable them to reach the right information by using the media, is important. In order to both inform patients about complementary and supportive practices and integrate these practices into the clinic, the attitudes and practices of nurses, who are professional practitioners of this profession, should be determined during their education periods. The needs analysis should be carried out by determining the knowledge levels of the students about complementary and supportive practices, and the course content should be created accordingly. In the light of these findings, conducting cross-sectional studies with larger samples and qualitative studies in which students' attitudes and experiences are evaluated is recommended. It is considered that the inclusion of lessons in which evidence-based findings of complementary and supportive practices are presented in the nursing curriculum will enable students to reach the right information during nursing education.

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