Original Article

The attitudes of nursing students regarding the complementary and alternative medicine

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ABSTRACT

The aim of this study was to determine the attitudes of nursing students towards complementary and alternative medicine. The sample consists of voluntary students (n=152) who had been present at school at the date of data collection. The data was collected via a questionnaire prepared by researchers and also via the "Holistic Complementary and Alternative Medicine Questionnaire (HCAMQ) which was developed by Hyland et al. (2003). The mean age of students was 20.09±1.6 (min=17, max=24). The mean score of scale was 25.41 ± 5.25 (min=11, max=45). The total score average of the first graders was 24.77±5.46, and of the last graders was 27.1±4.26. The difference between them was found to be statistically significant (t=-2.482, p=0.014). It is detected that more than half of the student nurses have no information about complementary and alternative medicine and that last graders, compared to the first graders, have a more negative attitude towards CAM applications.

Descriptors: Complementary Therapies; Students, Nursing; Staff Development.

INTRODUCTION

The use of complementary and alternative medicine (CAM) is increasing worldwide[1]. Complementary and alternative medicine (CAM) has been defined as a group of diverse medical and health care systems, practices and products that are not generally considered part of conventional medicine[2]. These therapies include acupuncture, chiropractic, herbal medicine and dietary supplements, nutraceuticals, homeopathy, mind– body techniques, spirituality and faith healing, massage, therapeutic touch and a number of others[3]. In 21th century, it is thought that complementary and alternative medicine play a significant role in

healthcare and especially in self-treatment of healthy and unhealthy individuals[4]. Complementary and Alternative Medicine (CAM) therapies are becoming increasingly acceptable by the general public and are increasingly used around the World[3].

As the use of CAM therapies increases in Turkey, health care providers must attempt to increase their level of knowledge and access to reliable resources regarding the safety and efficacy of CAM therapies[5].There is a high prevalence of complementary and alternative medicine (CAM) use, even with great advances in conventional medicine (CM). The global prevalence of CAM use is 9.8–76.0%[6-7]. According to World Health Organization data; complementary and alternative medicine were applied at least once at the rate of 80% in Africa, 75% in France, 70% in Canada, 48% in Australia and 42% in America[8]. The relative popularity of therapies differs between countries, but public demand is strong and growing[9]. Approximately 38% of adults use some form of CAM for health promotion and symptom management[10-11]. According to recent studies; it is stated that 57.1% of pregnant women[12], 66.5% of oncology patient[13] and 43.9% of patients who visited the pediatric emergency service[14] used complementary and alternative medicine towards symptoms. Reportedly, up to 61% of cardiac patients with coronary artery disease and patients at risk of arteriosclerosis use CAM[15]. Knowledge, attitudes and approach of health professionals about Complementary and Alternative Medicine have huge importance in the entire life and different cases to improve health, prevent illness and support to treatment[12,16].

The purpose of CAM therapies is healing. Nurses are natural healers; in partnership with patients, they restore balance and integrity to patients' minds and bodies[17]. Interest in the use of CAM in nursing practices has increased in recent years[18]. It is expected from the nurses who adopt integrated approach in patient care to develop nursing applications depending on evidence by reference to complementary and alternative medicine, to have knowledge about effects, side effects and reliability of complementary and alternative treatments and to direct the healthy/unhealthy individuals to use complementary and alternative medicine properly and safely[2,16,19]. In order to manage this role properly, they have to get prepared for their roles starting from studentship. Therefore, In some sources it is seen that nursing schools have integrated CAM training in their syllabus[20-21].

In this article, we will share some data that we have derived from our study on the attitudes of nursing students, who are at the first and fourth grades of a health school that have a four-year-training after high school in Marmara district of Turkey, towards complementary and alternative medicine.

METHODS

This descriptive and correlational study was started after receiving approval from the authorities of Sakarya University. Sakarya University is in Sakarya province which is located Marmara Region. Sakarya Health School provides education to nursing and midwifery students about their professions. Study was conducted between May and June 2014. The universe of the study is composed of first (n=231) and fourth grade (n=127) students who study nursing at a Health School, and the sample consists of voluntary students

(n=152) who had been present at school at the date of data collection.

The data were collected via a "Personal Information Form" which included 17 questions that were prepared by the researchers themselves in line with the literature[16,22-23], and "Holistic Complementary and Alternative Medicine Questionnaire (HCAMQ)" which measures the attitudes of students towards complementary and alternative medicine. Personal Information Form includes items on age, grade, gender, mother's and father's education status and questions regarding knowledge and attitudes about the Complementary and Alternative Medicine.

"Holistic Complementary and Alternative Medicine Questionnaire (HCAMQ)" which was developed by Hyland et al. (2003))[24] and validity and reliability in Turkish performed by Erci (2003)[21], is used. The scale consisted of 11 items on a six-point Likert format. Items 2, 4, 6 and 9 were scored negatively and the rest positively. The scale is a 6-point Lickert Type scale in which 1 stands for "strongly agree", 2 stands for "agree", 3 stands for "mildly agree", 4 stands for "mildly disagree", 5 stands for "disagree" 5 stands for "strongly disagree''. The highest score to get from the questionnaire is 66 and the lowest is 11. The higher score you get, the more negative attitude towards complementary and alternative medicine you have. Alpha reliability coefficient of the scale in the study which is performed Erci (2003) was 0,72[21].

The participating students were informed of the purpose of the study, Questionnaire and questionnaire's content and signed an informed consent statement. The data were collected by face to face interviews with the students.

Statistical Analysis

Internal consistency and homogeneity between the items were calculated using Cronbach's alpha coefficient. Total of the HCAMQ were shown as mean ±standard deviation (SD). The Kolmogorov Smirnow normality test were used for the evaluated the distribution of the data were normal, before the analysis. Therefore, the independent sample t test and Mann Whitney U test were used to compare the total scores and sociodemographic features. A p-value <0.05 was considered statistically significant. The data that were collected in the spring semester of 2013-2014 are evaluated via SPSS.

RESULTS

A total of 84.9 % of the students who have participated in the study (n=129) were female, 15.1 % were male (n=23) and the mean of age was 20.09±1.6 (min=17, max=24). It was also detected that 1st grade nursing students are 72.4 % (n=110) and the last grade students were 27.6 % (n=42). The mean of scale's score was 25.41 ± 5.25 (min=11, max=45). The students were asked if they had any information about CAM, and a total of 49,3 % (n=75) of the students gave the answer "yes", and 50.7 % (n=77) of them "no". % 59.2 (n=90) of students expressed that they not use complementary and alternative medicine and %81.6 (n=124) of students prefer to use medical care when they faced any health problem.

The total score average of the first graders was 24.77±5.46, and of the last graders was 27.1±4.26. The

difference between them was found to be statistically significant (t=-2.482, p=0.014). When the scale scores of the students were compared according to gender, it was seen that there was no statistically significant difference between the CAM attitudes of male ($\bar{x}$ =25.04 ± 5.34, min=11, max=35) and female ($\bar{x}$ =25.48 ± 5.25, min=11, max=45) students (U=1464, z= -0.100, p=0.920) (Table 1).

Table 1: The comparison between the scale scores and sociodemographic features.

Features	n (%)	Mean ± sd	(Min-Max.)	Test statistic	p*
Gender					
Female	129 (84.9)	25.48 ± 5.25	nov/45	U=1464,	0.920
Male	23 (15.1)	25.04 ± 5.34	nov/35	z= -0.100	
Grade					
1. Grade	110 (72.4)	24.77±5.46	nov/45	t=-2.482	0.014
2. Grade	42 (27.6)	27.1±4.26	18-38		

* p values of the statistically significant correlation coefficients were shown as bold

DISCUSSION

A total of 50.7 % of the student nurses (n=77) in this study stated that they had no information on complementary and alternative medicine. It was also found out in the study that they had limited information on the subject[5,18,22-23]. A number of students between the rates of 64.5 and 61.3 % expressed that there should be a course on complementary and alternative medicine in the nursing curriculum and a number of students between the rates of 62.3% and 57.8% stated that complementary and alternative medicine should be used in patient care practices[5,23]. The fact that students in the sample group have limited information on the subject may be related with the fact that complementary and alternative medicine does not appear satisfactorily in the nursing curriculum.

The recent increase in chronic diseases led the patients' interests to complementary and alternative medicine. In the studies conducted, it is also clear that complementary and alternative medicine is being progressively used worldwide[12-14,21,]. It has been a necessity that health professionals like doctors, nurses, etc. should take part in complementary therapies in order to meet the increasing need on this subject[16]. Doctors and nurses have an important role on the patients' accurate and responsible administration of drugs and also on complementary and alternative medicine practices[23]. It was found out in the studies that nurses have inadequate information and education on the subject but a positive attitude towards it[4].

The increase in the total score from the scale is a sign of negative attitude towards complementary and alternative medicine[21]. The average score of nursing students in the sample group was 25.41 ± 5.25 (min=11, max=45), which shows they have a positive attitude towards complementary and alternative medicine. Many other studies have parallel results to ours[2,5,18,22-23].

The correlation between occupational training and complementary and alternative medicine attitudes of student nurses was studies and it was seen that the average score of first graders from the scale was 24.77±5.46 and the average score of 4th graders was 27.1±4.26. The difference between the scores was statistically significant. In the literature review, there was no study evaluating the correlation between the

grade of student nurses and their attitudes towards alternative medicine. In the study by Akan et al. (2012) 1st grade students studying medicine have a more positive attitude towards this subject compared to the ones in higher grades, which demonstrates a similar result to our study[25]. It is quite essential that medicine, nursing and midwifery students get as much efficient knowledge as health professionals on complementary and alternative medicine before getting into the professional life. It is also important to increase the awareness on the use of these treatments in society

Many methods that are used in CAM for nursing show similarity with attempts of nursing. CAM was widely accepted by society. Therefore the An opportunity shall be given to nurses to learn about this topic via continuing education or elective courses and an opportunity shall be given to nurses to do research about security and the efficiency of CAM.

CONCLUSION

It is detected that more than half of the student nurses have no information about complementary and alternative medicine and that last graders, compared to the first graders, have a more negative attitude towards CAM applications.

The sample in this study reflects only one area of Turkey. The findings of the study should be limited to this population. The findings, therefore, cannot be generalized to all the Turkish nursing students.

It is concluded that student nurses need to be informed about the efficacy and reliability of Complementary and Alternative Medicine methods which have increasingly been used for the last few years.

“There are no incurable diseases — only the lack of will. There are no worthless herbs — only the lack of knowledge” said Avicenna.

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