Original Article

Healthy Living Behaviors of Medical and Nursing Students

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Abstract

Background: Health workers are expected to be role models in the society. In this reason it is important to take responsibility of their health.
Objective: To determine and compare healthy living behavior of the medical and nursing students.
Methods: The sample in this comparative and descriptive study was 212 students. For data collection, Health Promotion Lifestyle Profile and Value Survey were used.
Results: Overall mean score was 134.2±19.14 for Health Promotion Lifestyle Profile and 8.90±2.13 for Value Survey. Nursing students' scores from both scales were higher than medical students ($p<0.05$), with the lowest scores for physical activity subscale.
Conclusion: Although Health Promotion Lifestyle Profile and Value Survey scores of the students were higher than the scores of similar studies in Turkey showing that they are aware of the importance of healthy life, they seem not to behave accordingly.

Key words: health promotion, students, medical, nursing, healthy behavior

Introduction

A healthy behavior can be defined as any behavior which one believes in and displays in order to stay healthy and to avoid diseases (World Health Organization, 1986). The concept of health promotion focuses on behavioral changes that require knowledge, skill, attitude and behavioral gain to maximize the status of health. It is one of the hottest topics researchers are greatly attracted to. The results of studies conducted among different groups of people have shown that health professionals exhibit more positive health behaviors compared to others (Palank, 1991; Chalmers, Seguire, & Brown, 2002). Concerning disease prevention and health promotion issues, health workers bear the responsibility of leading exemplary lifestyles and helping society become conscious of health risks and ways to lead a healthy lifestyle. Both physicians and nurses are expected to be role models. Thus not only physicians but also nurses need to provide sufficient information on behaviors leading to disease prevention and health promotion. However, studies conducted are insufficient to prove this suggestion as valid and acceptable.

It is assumed that health workers who adopt and display healthy lifestyle behaviors throughout their professional lives can motivate their patients to improve their health, which can also contribute to improving health care from the viewpoint of public health (Wolf, 1994). Both national and international studies conducted among students show inconsistent results (Bellas, Asch, & Wilkes, 2000; Chalmers et al., 2002; Hui, 2002; Steptoe et al., 2002; Haddad et al., 2004; Von et al., 2004; Lee & Loke, 2005; Al-Kandari & Vidal, 2007).

There were certain studies carried out in health-related departments, to our knowledge, in our country, yet none of them addressed the issue at hand among both medical and nursing students. The aim was to determine and compare healthy living behaviors of medical and nursing students. This study can contribute more to future interventions in health promotion as current medicine and nursing students become accepted as role models in the society and promote better community health in the future.

Methods

Study design and samples

This descriptive and comparative study was carried out in the Medical Faculty and the Faculty of Nursing in İzmir, Turkey. All female students in their third academic year of medical and nursing schools were included. The response rate was 79.2% (84) for medical students and 99.2% (128) for nursing students, resulting in a total study population of 212 (90.2 %) students.

Instruments

Data was collected by a structured, self-report questionnaire with two sections, specifically designed for the study. The first section consisted of 21 items addressing demographic information, smoking and alcohol use, economic status, living conditions, and relationships with family and friends.

The second section was about health promotion attitudes and behaviors reflected by the instruments of the Health-Promoting Lifestyle Profile (HPLP) and Value Survey (VS).

HPLP. The HPLP evaluates health promotion attitudes and behaviors of participants. It was developed by Walker et al, and Turkish reliability and validity was performed by Esin (Esin, 1997). The responses for 48-itemed scale were on a four-point Likert scale, and it has six subscales of health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations and stress management. The increasing scores show that the individuals highly exhibit the stated healthy behaviors (Esin, 1992).

VS. The reliability and validity of VS, developed by Wallston et al. (Wallston, Wallston, & Kaplan, 1976), were carried out in Turkish by Esin and Erdogan. There are 10 statements, and participants rank the statements from "1" to "10" based on personally perceived importance. The higher scores show higher health value (Esin, 1997).

The questionnaires were distributed and completed in class.

Data analysis

The statistical package SPSS 11.0 was used for the statistical analysis of the data. Chi-square was used to compare the profile of students in medical and nursing schools. The *t*-test and Mann-Whitney U, when appropriate, were used to compare the HPLP and VS scores of medical and nursing school students, and the status of health insurance. ANOVA was used to determine any differences in the HPLP and VS scores according to BMI, living environment and the living places of the students. MANOVA analysis was carried out in order to determine whether the difference in the scores of the HPLP and VS emerged from age difference or the school. A significant *p*-value was set at 0.05 for all the statistical tests.

Ethical considerations

The required legal and ethics committee approvals were obtained from both the Medical Faculty and the Faculty of Nursing. The principles of informed consent and confidentiality were taken into consideration throughout the survey.

The questionnaires were implemented by instructors who were not involved in the study and participants were instructed not to write their names or identification numbers on their questionnaires.

Table 1. Demographic and Socio-Economic Characteristics of The Participants (n = 212)

	Nursing Students Mean±SD)	Medical Students (Mean±SD)	*p*-values
Age	22.07±1.18	20.73±1.20	0.000
BMI	20.90±2.49	21.08±2.80	0.632
	N (%)	**N (%)**	
Education level (mother)			0.000
Illiterate	17 (13.3)	5 (6.0)	
Primary school	74 (57.8)	14 (16.7)	
Secondary school	29 (22.7)	25 (29.8)	
Higher education	8 (6.3)	40 (47.6)	
Have a social insurance			0.082
Yes	117 (91.4)	82 (97.6)	
No	11 (8.6)	2 (2.4)	
Effects of living environment on health			0.021
Positive	84 (65.6)	55 (65.5)	
Negative	35 (27.3)	14 (16.7)	
Not know	9 (7.0)	15 (17.9)	
Living place			0.000
Student hostel	66 (51.6)	19 (22.6)	
Alone	4 (3.1)	51 (6.0)	
With family	24 (18.8)	18 (21.4)	
With a friend	34 (26.6)	42 (50.6)	
Smoking			0.143
Yes	20 (15.6)	7 (8.3)	
No	108 (84.4)	77 (97.1)	
Alcohol			0.062
Yes	30 (23.4)	30 (35.7)	
No	98 (76.6)	54 (64.3)	
Income satisfactory			0.000
Yes	60 (46.9)	66 (78.6)	
No	68 (53.1)	18 (21.4)	
Leisure time activities			0.000
Working	1 (0.8)	1 (1.2)	
Sports activities	4 (3.1)	8 (9.5)	
Social activities	116 (90.6)	72 (85.7)	
None	7 (5.5)	3 (3.6)	
Current health status			0.123
Good	112 (87.5)	80 (95.2)	
Bad	16 (12.5)	4 (4.8)	

*No statistic calculated, 100% agreement

Table 2. Comparison of HPLP and VS According to Main Socio-Demographic Variables of The Participants

			VS	HPLP
		n	**Mean±SD**	**Mean±SD**
Faculty				
	Medicine	84	7.83±2.77	124.89±15.84
	Nursing	128	9.60±1.11	140.18±18.74
	p-value		0.000*	0.000#
Body mass index†				
	<20.0	77	9.21±1.77	135.17±17.77
	20.0-24.9	118	8.72±2.37	134.10±20.10
	>24.9	17	8.77±1.64	129.53±18.70
	p-value		0.218	0.433
Have a social insurance				
	Yes	199	8.85±2.18	134.85±19.20
	No	13	9.62±0.65	122.92±14.59
	p-value		0.594*	0.034#
Effects of living environment on health†				
	Positive	139	9.14±1.68	135.03±19.62
	Negative	49	8.92±2.18	136.84±17.56
	Not know	24	7.50±3.50	123.33±19.14
	p-value		0.053	0.006
Living place†				
	Student hostel	85	9.08±1.93	134.99±19.20
	Alone	9	8.11±2.62	133.44±20.64
	With family	42	9.05±1.91	141.05±19.14
	With a friend	76	8.71±2.37	129.41±17.93
	p-value		0.614	0.009

t-test , * Mann-Whitney U, †ANOVA

Table 3. Comparisons on The HPLP Subscales of The Students According to Their Faculties

	Faculty						
	Medical (n=84)		Nursing (n=128)		*p*-values	Total (n=212)	
	Mean	SD	Mean	SD		Mean	SD
Spiritual growth	2.90	0.41	3.19	0.40	0.000#	3.07	0.43
Health responsibility	2.28	0.48	2.74	0.54	0.000*	2.56	0.56
Physical activity	2.04	0.58	2.07	0.64	0.795*	2.05	0.62
Nutrition	2.68	0.48	2.92	0.54	0.000*	2.85	0.54
Interpersonal relations	3.01	0.44	3.35	0.46	0.000*	3.22	0.48
Stress management	2.44	0.40	2.81	0.48	0.000*	2.67	0.48

t-test , * Mann-Whitney U

Results

Of the participants 39.6% were from the Medical Faculty, and 60.4% were from the Nursing Faculty. The body mass index was within the normal range for 55.7% of the students, of whom 90.6% (192) perceived their health as being good. The socio-demographic characteristics of the students according to their faculties are given in Table 1.

The mean scores of students for the HPLP and VS were found as 134.12±19.14 and 8.90±2.13, respectively. Statistically, the scores of nursing students for both scales were significantly higher than that of medical students. The socio-demographic data was compared with the HPLP and VS in Table 2.

The mean scores of HPLP subscales can be seen in Table 3.

It was found that the mean age of nursing faculty students (22.07±1.18) was significantly higher than that of medical students (20.73±1.20). The age was found to be important only for the subscale of health responsibility and it was not influential in other subscales and the total score of HPLP and the VS score.

Discussion

The student's scores for the VS and HPLP were found higher when compared with the other studies using these scales (Pasinlioğlu & Gözüm, 1998; Yetkin & Uzun, 2000; Özbaşaran & Çetinkaya, 2004; Ayaz, Tezcan, & Akıncı, 2005). This may be due to several reasons. We reckon that the education model is one of the most important distinguishing factors that affect all the scores, especially of nursing students. The curriculum of the nursing faculty which

focuses on disease prevention and health promotion may exert a potential effect on this.

There are inconsistent results in the literature which determine quite higher HPLP scores for students who barely show health promoting behaviors (Palank, 1991; Lee & Loke, 2005; Al-Kandari & Vidal, 2007). Different studies carried out among nursing students showed that they had the highest scores on the interpersonal relations subscale, and the lowest on the exercise subscale, and statistically significant differences were discovered in the subscales of health responsibility, exercise, and interpersonal relations (Hui, 2002; Haddad et al., 2004; Von et al., 2004; Al-Kandari & Vidal, 2007). In the studies held in Turkey, the students had the highest scores on the spiritual growth subscale, and the lowest scores were on the subscales of exercise, nutrition, and stress management, respectively (Yetkin & Uzun, 2000; Özbaşaran & Çetinkaya, 2004; Ayaz et al., 2005). In our study, the nursing students had higher scores than the medical students except for the exercise subscale.

It is expressed in many studies that regular exercise has an effect on health and is an important indicator of health promotion. However, our study showed that the exercise subscale had the lowest score and it was the only subscale not correlated with the VS. According to the VS scores, it can be said that the students thought of health as important but did not do any exercise to maintain their health. These low scores were similar to national and international studies (Pasinlioğlu & Gözüm, 1998; Hui, 2002; Özbaşaran & Çetinkaya, 2004). The results of different studies conducted among medical, nursing and dentistry students showed that students did regular exercise on various levels (Najem, Passannante, & Foster, 1995). Another study done among the fourth year medical students showed that exercise was the unfavorable behavior (Kamien & Power, 1996). In our study, it was observed that the frequency of sports activities was low. Low levels of sports activities were supportive of low exercise scores. University students' interest in social activities was fairly obvious. The value of exercise as an important part of health promotion should be acknowledged and some effort should be exerted to transform it into an attitude, before the students can become role models.

Besides exercise, nutrition is also an important part of a healthy lifestyle. Young people who live away from home for education and who are in a period of growth are most inclined towards irregular nutrition habits which must be avoided. For this reason, it is conspicuous that those students living with their families had the highest scores for all subscales of the HPLP in contrast to those living alone or living with friends. The students living in student hostels also had scores for the HPLP similar to those for living with families. Living a stable life seems to be an important factor, although it is not as effective as living with a family. The VS scores are the highest among students living in student hostels. It is important to carry out studies on the topic of nutrition as a part of a healthy lifestyle, especially in risk groups, in order for health workers to remain healthy throughout their professional lives. On the other hand, the nutrition subscale has shown low results among smokers and drinkers. It seems that those who have developed these habits do not pay attention to their health and nutrition, which brings the issue of addiction into the picture. The required support for students towards their education and counseling should be provided by taking into account not only their role model priorities in the future but also their individual health.

Ozbasaran and Cetinkaya (2004) stated that the HPLP is affected by gender, income, living place, parents' education and BMI variables. In our study, females who had BMI<20 and health insurance had high scores in health responsibility subscale. The VS scores increase as parents' education level increases, but it is unknown whether it was transformed to a healthy lifestyle. Student who had a moderate income had the highest scores from the VS. It can be said that those who have moderate level of income pay attention to health prevention and promotion. Those students with higher income levels had the highest scores for the spiritual growth subscale. This may imply that an above average income will enable individuals to reach their goals.

We conclude that although nursing students had higher scores than medical students, their overall score was not very high. This result can be considered as a first step towards creating an appropriate environment and learning opportunities to avoid negative or inappropriate behaviors of health

workers who inspire the community to aspire towards healthy living behaviors. There is a strong need for further studies for understanding both healthy behaviors and beliefs in order for the future doctors and nurses to become role models and to support health promotion in the community for which they will work.

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