

RESEARCH COMMUNICATION

The Evaluation of School of Health Students' Knowledge and Behavior Of Healthy Life-styles of Related To Importance To Prevent Cancer

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Abstract

This study was planned as a descriptive evaluation of School of Health students knowledge and healthy lifestyle behavior related to prevention of cancer. The study has been carried out in Nursing, Midwifery and Health Official Departments at Celal Bayar University School of Health, between November 2007 and January 2008. The subjects comprised 345 volunteer students. The data were collected using a questionnaire covering nutritional status and attitudes related to the prevention from cancer, and results were assessed using the Health Promotion Lifestyle Profile Scale. The mean age was 20.9 ± 2.01 years and 22.6% were male. Some 88.4% of the students considered cancer to be a preventable illness and 70.1% of them believed that it could be prevented by healthy nutrition. The mean score of the Health Promotion Lifestyle Profile Scale was 124.8 (SD, 19.9). In conclusion, it was found that students participating in this study have good level of knowledge on cancer prevention. Health behavior was found to be moderate.

Keywords: Cancer - prevention - nutrition - behaviors of healthy life-styles

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Introduction

The incidence of cancer in our country has been steadily increasing in recent years and it is listed as the second leading cause of death after cardiovascular diseases (Özet and Muhsiroğlu, 2007). The American Cancer Society (ACS) set as national goals to improve the quality of life of cancer patients and to decrease the incidence and deaths from cancer by 2015 (Byers et al., 2002). Nutrition, which is a one of the lifestyle factors that can be controlled and that plays a role in the development of cancer, has been reported to have an association with 35% of cancers (Byers et al., 2002; Özet and Muhsiroğlu, 2007). In general, healthy nutrition strengthens the immune system and defense mechanisms which increases the body's defense against cancer (Robinson, 1999).

Social, economic and cultural factors have a strong effect on personal choices for diet and exercise. Behavioral factors, such as, smoking cigarettes, eating one type of food, and working actively throughout one's life are some of the risks affecting the development of cancer. In particular healthy nutrition and regular physical activity have been scientifically proven to decrease the risk for cancer (Byers et al., 2002).

Health promotion is "the process of enabling people to increase control over and to improve their health" (World Health Organization, 1986) and a positive, dynamic process, rather than a mere extension of illness-

avoidance behavior. Health promoting life-style is "a multidimensional pattern of self-initiated actions and perceptions that serve to maintain or enhance the level of wellness, self-actualization and fulfillment of the individual" (Hui, 2002) Within the concept of health promotion it is first necessary for knowledge, skills, attitudes and behaviors to be acquired to achieve the highest level of health, because positive health behaviors need to be acquired and maintained to improve health (Zaybak and Fadiloğlu, 2004).

This study was planned as a descriptive research to evaluate the school of health students' knowledge and behavior of healthy lifestyles of related to importance to prevent cancer.

Materials and Methods

The study has been carried out in Nursing, Midwifery and Health Official Departments at Celal Bayar University School of Health, where have 419 students, between November 2007 and January 2008. The sample of the study was composed 345 volunteer students.

The data were collected by means of two forms. The first form, called Data Form was consisted of question on the nutritional status and attitudes of students related to the prevention from cancer, second form, the Health Promotion Lifestyle Profile Scale (HPLP). HPLP was developed by Walker, Sechrist and Pender in 1987 by

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Table 1. The Mean Scores on HPLP and Subscale

	X	S D	Answers Min-max	Scale Min-max
HPLP	124.81	19.93	80-185	48-192
Self –Actualization	36.75	6.27	21-52	13-52
Health Responsibility	23.23	5.57	10-40	10-40
Exercise	9.72	2.90	5-20	5-20
Nutrition	16.05	3.30	7-24	6-24
Interpersonal Support	20.76	3.67	10-28	7-28
Stress Management	18.27	3.62	10-28	7-28

the alpha value of 0.92. HPLP: 48 items measuring health-promoting lifestyle. Self-initiated health behavior that serve to maintain or enhance level of wellness, self-actualization, or wellness, based upon the Health Promoting Model (Walker et al., 1998). The scale includes both health-protecting behaviors that decrease risk for illness, health promoting behaviors that sustain or increase well-being, self-actualization, and personal fulfillments. It is accurate and current and the scale has been used in many similar studies.

HPLP was adapted to Turkish population at 1997 by Esin (1997). It contains 48 items and 6 subgroups; exercise, nutrition, interpersonal support, self -actualization, health responsibility, stress management. Each of them can be used separately or together. Total point reflects the healthy life style point. The lowest point is 48, the highest point is 192. The alpha score in our study was found as 0.93.

Results

In the examination of School for Health Sciences university students' sociodemographic characteristics and family history it was determined that their mean age was 20.94±2.01 years, 31.7% were in the first year, 22.3% in the second year, 77.4% were female, 43.5% were in nursing school, 80.9% had health insurance, 66.1% had a balanced parental income and expenses, 41.2% lived in an apartment with friends, 40.3% lived in the dormitory, 84.9% had a nuclear type of family, the longest place of residence for 47.5% was the province center, 30.1% had a family history of cancer and of these 63.8% were second degree relatives.

In the examination of students' health promotion behaviours it was determined that 84.6% did not drink alcohol, 80.9% did not smoke cigarettes, 30.1% did breast and testicular self examination every month, 10.5% ate brown bread, 10.4% took a daily vitamin supplement, their mean number of meals per day was 2.75±0.71, their mean daily fluid intake was 6.83±4.08 glasses, 76.9% had a body mass index within normal limits, 15.7% used a cream sunscreen before going out in the sun and 47.8% used a cream sunscreen before sunbathing in the summer, and 10.4% exercised regularly.

In the examination of students' knowledge about the importance of nutrition in the prevention of cancer it was determined that 88.4% thought that cancer could be prevented, 70.1% that nutrition could prevent cancer, 98.0% that cigarette smoking and 90.2% that alcohol consumption were causes for cancer.

Table 2. Relationships between Class, Income, Longest Place of Residence, Family History of Cancer in Degree and HPLP Mean Scores

Variables	HPLP	
	F	P
Class	6.575	0.00
Parental income	8.510	0.00
Longest place of residence	3.868	0.01
Family history of cancer in degree	6.215	0.00

Table 3. Relationships between Some Variables and HPLP Mean Scores

Variables	HPLP	
	Z	P
Health insurance	3.018	0.00
Cancer was a preventable disease	2.090	0.03
Used alcohol	2.301	0.02
Regularly exercised	3.512	0.00
Skin protective practices	3.670	0.00

Table 4. Relationships between Age, Number of Meals per Day, amount of Fluid Intake per Day and HPLP Mean Scores

Variables	HPLP	
	r	P
Age	0.221	0.01
Number of meals per day	0.109	0.04
Amount of fluid intake per day	0.174	0.00

The mean score of the HPLP level of the student was determine as 124.8±19.9. The subgroup mean scores of the scale are 36.8±6.27 self-actualization, 23.2±5.57 health responsibility, 9.7±2.9 exercise, 16.1±3.3 nutrition, 20.8±3.67 interpersonal support, 18.3±3.62 stress management (Table 1).

The relationships between variables and HPLP mean scores were analyzed with One Way ANOVA. The HPLP mean scores were higher in the 3rd and 4th year students compared to the 1st and 2nd year students, in students with parental income less than expenses compared to students with income balanced with or more than expenses, in students with a family history of cancer in a second degree relative compared to those with a family history of cancer in first or third degree relatives. The students whose longest place of residence was a village had a lower mean score than the students who lived in towns, cities or

the province center. The differences between variables and HPLP mean scores in the One Way ANOVA analysis were also found to be statistically significant ($p < 0.05$) (Table 2).

Mann Whitney U test was conducted between the variables and HPLP. The HPLP score means were found to be higher at a statistically significant level for students who had health insurance compared to those who did not, who stated that cancer was a preventable disease compared to those who did not, who used alcohol compared to those who did not, who regularly exercised compared to those who did not, who used a cream sunscreen before going outside compared to those who did not ($p < 0.05$) (Table 3).

A correlation analysis was conducted between HPLP mean scores and age, number of meals per day, and amount of fluid intake per day. As a result of the analysis it was determined that there were positive correlations between the variables and HPLP mean score ($p < 0.05$) (Table 4).

Discussion

The ACS has determined that there is scientific evidence that healthy nutrition, avoiding obesity, regular physical exercise, and not smoking or drinking alcohol decrease the risk for cancer (Byers et al., 2002). Our study group is not under cancer risk in the aspect of drink alcohol and smoke cigarettes but the rate of exercised regularly is 10%.

Only 30.1 % of participants in this study practiced health behaviors of breast and testicular self examinations. These findings are similar to those found by Smith and Bashore (2006), in which only 28.4% of survivors performed routine self examinations. It is imperative that young cancer survivors understand the importance of self examination for early identification of either breast or testicular cancer.

In study, it was detected that school of health students participating in this study have good level of knowledge on cancer prevention. Health education may be positive impact on the cancer prevention.

In regards to sun exposure, 15.7% of the participants used appropriate sun productive behaviors. Jungers et al. (2003) evaluated the attendees at a professional baseball game and found that 42% used appropriate sun protection.

Although they have a body mass index within normal limits (76.9%), they are unable to have healthy nutrition in their practice. Only 10.5% of participants in this study ate brown bread, their mean number of meals per day was 2.75 ± 0.71 , their mean daily fluid intake was 6.83 ± 4.08 glasses.

In a study conducted by Oran and Turgay (2004) with Ege University nursing students their mean HPLP score was determined to be 120.86 ± 17.84 . In a study by Öztürk Can et al. (2008) the mean HPLP score was 113.6 ± 17.3 . The mean for the total HPLP score in Hui's (2002) study on a group of undergraduate nurses was 116.28 ± 16.82 . In a study by Zaybak and Fadiloğlu (2004) with university students who were and were not studying health related fields the mean HPLP score was determined to be 121.2 ± 16.4 . In a study by Özbaşaran et al. (2006) with female dormitory students who were not taking health related courses their mean HPLP score was 120.2 ± 15.8 ,

their interpersonal support subgroup mean score was 21.5 ± 3.95 and their health responsibility subgroup mean score was 20.6 ± 5.3 . The similar scores for university students, even though they are in different cultures, suggest that students in the same age groups display similar health behaviors.

In studies with nursing students by Hui (2002), MacDonald et al. (1994), Haddad et al. (2004), and Oran and Turgay (2004) it was reported that exercise was the least practiced behavior from the healthy lifestyle behaviors scale's subgroups. This result shows that students are not able to find time for exercise.

In a study conducted by Sevil et al. (2006) with Karsiyaka Girls' Occupational and Anadolu Occupational High School students it was determined that as the parental income increased their HPLP score means also increased at a statistically significant level. The study having the similar result with our study in respect to relationship between the parental income and HPLP score means.

In conclusion, it was detected that students participating in this study have good level of knowledge on cancer prevention. Health behaviors of student was found in moderate level. They have more positive health behaviors as the 3rd and 4th year of health education, family history of cancer in a second degree relative, behaviors related to prevent cancer (regularly exercised, healthy nutrition, skin protection practice etc.) than the others. School of Health students should be developed positive health behaviours, and appropriate health education interventions should be developed.

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