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Attitude and behaviour of hospital workers on healthy diet and lifestyle in Eastern Turkey

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ABSTRACT

This research was conducted for the purpose of determining the healthy lifestyle behaviors of physicians, nurses and other hospital employees in Medical Faculty of Yuzuncu Yil University, Van, Eastern Turkey.

A total of 440 physicians, nurses and other hospital employees working in the University Hospital were invited to participate. Research data in this descriptive study were collected with a questionnaire covering; nutrition consuming frequency, nutrition consuming behaviour, general health condition, body height and weight, blood pressure, alcohol and cigarette consumption, exercise, socio demographic characteristics.

Smoking more than 10 cigarettes a day in smokers among physicians, nurses, and other employees were 83.3%, 76.7% and 46.9% respectively (p: 0.004). The highest rates of obesity were seen in physician (20.9%)(p=0.000). The highest rates of hypertension were seen in other employees (24.3%)(p=0.000). Eating fast food daily among physicians, nurses, and other employees were 10.5%, 7.4% and 0% respectively (p: 0.000). 11% of females and 17.1% of male were doing regular exercise. Starting the day without having breakfast among female and male were 37.2%, 43.8% respectively.

As they are the role model for the rest of the population more time and care should be given to understand the reasons, so they may improve their attitudes regarding healthy diet and lifestyle.

Key Words: Healty diet, lifestyle, obesite, hypertension, exercise, health workers

Introduction

Non-smoking, a low Body Mass Index (BMI), being physically active, and adherence to a Mediterranean diet were associated with a lower disease burden. A prospective cohort study clearly shows the benefits of a healthy lifestyle. The disease burden among persons who never smoked, maintain a normal BMI, are not physically inactive, and adhere to a healthy diet is considerably lower than that of those who do not adhere to any of the healthy lifestyle behaviours and results in a minimum of two years longer life in good health. Each additional healthy lifestyle factor contributes significantly to a longer life in good health independent of the lifestyle score someone already has (1).

Some studies measured a disease-specific mortality or the incidence of a chronic disease. A combination of healthy lifestyle factors is associated with a lower cancer incidence and mortality, particularly in subtypes such as colorectal cancer , or pancreatic cancer (2,3).

A study shows combined lifestyle factors healthy weight, high physical activity, non-smoking, limited alcohol consumption and a healthy diet- are associated with a lower colorectal cancer incidence in European populations characterized by western lifestyles (4). It is related with a reduction of the risk of coronary heart disease, stroke, diabetes and dementia (5-8).

Therefore, it is increasingly important to investigate potentially modifiable factors that are related to living longer in good health. Unhealthy behaviours, such as being physically inactive, smoking, unhealthy diet and irregular nutrition are leading contributors to morbidity and mortality.

This is the descriptive qualitative research investigating physicians and nurses' healty diet, lifestyle behaviours and attitudes in Turkey.

This research was conducted for the purpose of determining the healthy lifestyle behaviors of physicians, nurses and other hospital employees in Medical Faculty of Yuzuncu Yil University, Van, Eastern Turkey.

Materials and methods

Sample characteristics: A total of 440 physicians, nurses and other hospital employees

This study was presented in 20.th WONCA Europe Conference, OP-207, 22-25 October,September 2015, İstanbul, Turkey.
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working in the University Hospital were invited to participate.

The questionnaire was prepared by the researchers after review of the relevant international literature, and finalized following a pilot application prior to data collection.

Research data in this descriptive study were collected with a questionnaire covering; nutrition consuming frequency, nutrition consuming behaviour, general health condition, body height and weight, blood pressure, alcohol and cigarette consumption, exercise, socio demographic characteristics.

Of these, 430 responded to the questionnaire (response rate was 97.7 %).

Measurements: The blood pressure values of the individuals were obtained with a single measurement after they rested at least 15 minutes. A standard protocol was used for the measurement; it was ensured that the person is in a sitting position and the right arm of the person is naked as to allow for blood pressure. Systolic blood pressure (SBP) and diastolic blood pressure (DBP) were measured using a stethoscope and a sphygmomanometer. For the individuals who have not been diagnosed with hypertension before was diagnosed as "hypertension present" if average SBP ≥ 140 mmHg or average DBP ≥90 mmHg.

BMI, which handles weight and height together, was calculated using the formula weight (kg) / height $(m)^2$. BMI is a cheap and non-invasive criterion in evaluating obesity. According to WHO, individuals with BMI<18.5 are defined "low weighted", BMI=18.5-24.9 "normal weighted", BMI=25.0-29.9 "overweighted" and BMI≥30 are defined as "obese"(9).

Self reported physical activity levels in the leisure time were asked. Information about intensity, duration and frequency of the physical activities were collected.

Data analysis: Statistical analyses were performed using SPSS v.18..Descriptive analyses accomplished. Chi square and Mann Whitney U tests were used for comparisons. The level of significance was set at $p < 0.05$.

Ethical consideration: Medical school of Yuzuncu Yil University Research Ethics Committee (REC/ REF: 01/11.12.2014) approved the study. All participants gave written consent prior to interview.

Results

Data were collected from a total of 430 hospital employees. Of these participants were 35% (n=152 physician), 37.9% (n=163) nurses, 27.1% (n=115) other hospital employees). Of the respondents were 40% (n=172) female and 55.6% (n=240) married. Of the respondent were 42.8% single and 55.8% married. Mean (±SD) age of the respondents was 31.4±8.56 years and ranged from 18 to 65 years. The mean Body Mass İndex (BMI) of the respondents was 24.6±4.03.

Table 1 shows the sociodemographic characteristics of respondents.

Table 2 shows the data regarding to profession were found differences among among smoking, alcohol consumption, fast food consumption, BMI, blood pressure.

Our study showed that there was no significant relationship between profession and amount of alcohol consumption (p=0.222).

There was no significant relationship between profession (50% in physicians, 64.4% in nurses, 47.8% in other hospital employees) and the presence of obesity in first-degree relatives of individuals (p=0.757).

Table 1. Sociodemographic characteristics of respondents (n =430)

Characteristics	Physicians (%)	Nurses (%)	Other hospital employees (%)
Gender			
Male	69.7	70.7	77.4
Female	30.3	61.3	22.6
Mean Age	29.4	29.3	36.8
Marital Status			
Single	53.3	48.5	20.9
Married	46.1	50.9	75.7
Mean BMI	24.1	23.8	26.2

Table 2. Smoking, alcohol consumption, diet, exercise, BMI and blood pressure data according to profession

	Physicians(%)	Nurses(%)	Other hospital employees(%)	p*
Smoking				
Yes (among all the participants)	27.6	34.4	46.9	0.004
Daily smoking≥10(among the smokers)	83.3	76.7	66.6	0.016
Alcohol consumption				0.035
Yes	19.1	9.2	7	
Daily breakfast				0.687
No	55.9	39.3	24.3	
Frequency of daily meals				0.069
Less than three times	38.2	31.3	26.1	
Fast food consumption				0.000
Daily	10.5	7.4	0	
One or two times per week	38.2	33.1	32.2	
No	1.3	4.9	7	
Regular Exercise				0.340
Yes	13.2	13.5	18.3	
No exercise	45.4	51.5	47.8	
BMI				0.000
Overweight and obesity	39.8	26.3	58.2	
Obesity	20.9	7.9	15.6	
Blood pressure				0.000
≤120-80 mmhg	21.5	79.6	61.7	
Hypertansion	10.45	18.5	24.3	

*Chi square test.

When we look at the number of main meals consumed per day, 61.8% physicians, 68.7% nurses,73.9% other employees were consuming three main meals a day (p=0.069).

In our research most commonly skipped meal was breakfast and the most common reason for skipping meals was not having time. Skipping the meals due to not having time to eat among physicians, nurses, and other employees were 34.9 %, 25.8 % and 24.3 % respectively (p: 0.039).

Table 3 shows the data regarding to gender were found differences among smoking, alcohol consumption, fast food consumption,BMI and blood pressure.

The study showed that there was no significant relationship between gender and amount of alcohol consumtion (p=0.566). Our study showed that 11% female and 17.1% male were doing regular exercise (p=0.256). Starting the day without having breakfast among female and male were 37.2% and 43.8% respectively and the rate ofnever skipping meals was 35.5% and 29.8% respectively (p=0.965). 11% of females and 17.1% of male were doing regular exercise (p=0.340). Starting the day without having breakfast among female and male were 37.2%, 43.8% respectively (p=0.167).

Table 4 shows ratio of the findings as determined by marital status differences among smoking, alcohol consumption, fast food consumption, BMI and blood pressure.

The results showed that there was no significant difference between single and married individuals according to amount of alcohol consumption (p=0.872). Our study showed that 16.8% of the single and 12.5% of the married were doing regular exercise (p=0.097). Starting the day without having breakfast among single and married were 51.6% and 33.3% respectively (p=0.064). Never skip meals among single and married were 22.8% and38.8% respectively (p=0.064).

Discussion

In a study in Greece it was found that 38.6% of the physicians (40% of men; 37% of women) and 32 % of nurses were currently smokers (10, 11).

Table 3. Smoking, alcohol consumption, fast food consumption, BMI and blood pressure data according to gender

	Female (%)	Male (%)	p*
Smoking			
Yes (among all the participants)	24.4	42.6	0.000
Smoking≥10 daily (among the smokers)	18	32	0.000
Alcohol consumption			0.000
Yes	4.1	17.4	
Fast food consumption			0.059
Daily	4.1	8.1	
No	7	2.3	
BMI			0.015
Overweight and obesity	23.8	54.6	
Obesity	4.6	13.5	
Blood pressure			0.000
≤120-80 mmhg	85.4	70.9	
Hypertansion	9.88	17.4	

*Chi square test.

Table 4. Smoking, alcohol consumption, fast food consumption, BMI and blood pressure data according to marital status.

	Single (%)	Married (%)	p*
Smoking			
Yes (among all the participants)	26.1	42.5	0.001
Smoking≥10 daily (among the smokers)	20	30.8	0.002
Alcohol consumption			0.252
Yes	16.8	8.3	
Fast food consumption			0.000
Daily	13	1.7	
No	2.7	5	
BMI			0.000
Overweight and obesity	16.2	21.1	
Obesity	2	20.1	
Blood pressure			0.977
≤120-80 mmhg	84.6	74.8	
Hypertansion	6.9	19.5	

* Chi square test.

In a study in Ukraine smoking rate was found 32.5% in pediatricians, 37.5% in family physicians (12).

Our results show that an important part of physicians and nurses still smoke (27.6% and 34.4% respectively). Smoking is highest in other employees, male and married. But, average consumed amount of smoking per day is highest in physicians, male and single. According to our study smoking rates of physicians, nurses and other health workers was higher than smoking rates of general population of Turkey.

In a large national study in USA, 15.4% of surgeons met diagnostic criteria for alcohol abuse or dependence (13). In a study (Chronic Diseases and Risk Factors Survey In Turkey), in total 87% of the participants stated that they had never used alcohol. Only 13% of the participants used alcohol. While 23% of males drink alcohol, 4% of females drink alcohol (14).

In our study, alcohol consumption in physicians, males and single are more common than other hospital workers. Our rates are low in alcohol consumption, due to common Islamic beliefs, the low demand of alcohol consumption and possible social pressures on this subject in our region.

In a study in Japan, the primary care physicians' exercise frequency was as follows: daily, 11.6%; at least 2-3 times per week, 26.2% (15). In a study in nurses in Korea,the prevalence of regular exercise was the lowest 38.6% (16).

In a study in Turkey, 43.9% of the physicians stated that they never exercised, and 31.7% of them said that they participated in sportive activities occasionally (17). Compared with other studies in our study, hospital workers' exercise habits (especially in physicians, nurses, female and married) were found to be inadequate.

Our study showed eating fast food prevalance are more common in physicians,males and single. One tenth of the physicians eat fast food every day. Fast food eating rate of man two times higher than fast food eating rate of women. Also, fast food eating rate of single eight times higher than fast food eating rate of married. We could not find any research about this topic on physicians and nurses in the literature. Therefore, our data was not comperable.

In Puhl et al's study (18) respondents reported more mistrust of physicians who are overweight or obese, were less inclined to follow their medical advice, and were more likely to change providers if the physician was perceived to be overweight or obese, compared to normal-weight physicians who elicited significantly more favorable reactions. This study suggests that providers perceived to be overweight or obese may be vulnerable to biased attitudes from patients, and that providers' excess weight may negatively affect patients' perceptions of their credibility, level of trust and inclination to follow medical advice.

Accoring to WHO World Health Statistics 2014, 14% of famales, 10% of males are obese. In a study in USA, the prevalence of obesity was 35.5% among adult men and 35.8% among adult women (19). According to Canadian Health Measures Survey about 62.1% of the adult population is overweight (body mass index [BMI] $\geq$ 25 kg/m^2) and 24.3% is obese (BMI $\geq$ 30 kg/m^2) (20).

In a cohort of nurses and midwives in Australia, NZ and the UK, of the total sample of nurses and midwives the majority (61.87%) were outside the healthy weight range (overweight accounted for 32.81%, obese for 24.73% and morbidly obese for 3.37%). Males were overweight (45.22%) or obese (22.84%). Statistically significant differences were demonstrated between gender and BMI status ($p < 0.001$). Married nurses and midwives were the majority (61.85%) fell in the overweight categories. The association between marital status and obesity was significant at the 1% level (21). In a study in Turkey prevalence of obesity defined as BMI$\geq$30 kg/m^2, 15% in males and 29% in females (22).

We could not find any research for BMI measurement in physicians in the literature. Therefore, we can not compare our data. Our obesity rates showed that about one-fifth of the physicians are obese. Obesity in nurses were lower than nurses in other countries. Obesity rate of man was three times higher than obesity rate of women. Also, obesity rate of married was twenty times higher than obesity rate of single. The reason for these results may be the low sample counts.

Increased blood pressure is the leading risk factor for premature death, stroke and heart disease worldwide (23).

In a study it was shown that hypertension prevalance ($\geq$140 mmh SBP and/or $\geq$90 mmhg DBP) was lower in Canada (19.5%) than in the USA (29%) and England (30%). SBP is higher in men than women in the younger age groups and becomes higher in women than men after age 60 years in Canada and age 70 years in England and the USA (24).

In a study in Turkey, the overall prevalence of HT was 39.5% in male, 41.6% in female and 40.9% in total (25).

We could not find any research for blood pressure measurement in physicians and nurses in the literature. Therefore, we can not compare our ratio according to the doctors and nurses in Turkey and other countries. Our hypertension rates was lower than the general population in Turkey and other countries. According to gender our hypertension rates were found about two times more in men.

According to study results lifestyle and dietary attitudes of health care workers were not as desired. As they are the role model for the rest of the population more time and care should be given to understand the reasons, so they may improve their attitudes regarding healthy diet and lifestyle.

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