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Health-seeking practices and psycho-social factors related to health behaviors in a Turkish sample

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Key words: Health behaviors; quality of life; psycho-social factors; mental health; Turkey.

Abstract

Background: The aim of the present study was to examine health-seeking behaviors and psycho-social factors related to health behaviors (healthy diet, sleep and physical exercise) in a Turkish sample.

Method: Data were collected from 270 Turkish adults aged between 17 and 75 by using convenient sampling, between 2010 and 2012. A questionnaire which include items related to demographic information, health-related practices, health-seeking behaviors, The Health Behavior Questionnaire and The Medical Outcomes study short form- 36 (SF-36) was used in data collection.

Results: For physical and sexual health problems, most of the participants stated that they immediately seek out a physician. However, for mental health problems, a large proportion reported no action or applied some alternative ways of dealing, such as consulting friends. In order to explain the variance in health behaviors hierarchical regression analysis was performed and the results showed that age, mental health and seat belt use were positively, while smoking frequency was negatively related to engaging in health behaviors.

Conclusions: The participants were more reluctant to seek health care for mental health problems, which may indicate the stigma related with mental health issues. Also, mental health was found to be more related with health behaviors than physical health. Present findings suggest that future public health campaigns promoting health behaviors in Turkey may especially target younger people with an unhealthy life style, including smoking and risky behavior in traffic.

INTRODUCTION

Health has been defined as a positive state in terms of physical, mental and social well-being [1]. According to this definition, rather than a condition characterized by the absence of illness, health indicates achieving a balance between physical, mental and social well-being. This perspective underlines the importance of health promotion, prevention of illnesses through health-enhancing (e.g. regular physical exercise, eating a healthy diet, having regular and sufficient sleep) and health protective behaviors (e.g. regular health checks, using a seat-belt) [2].

Health-compromising behaviors, such as smoking and excessive alcohol consumption, are major threats to both quality of life and longevity in industrialized countries [3, 4]. Individuals can improve their health to a great extent by avoiding health-compromising behaviors, and engaging in health-enhancing and protective health behaviors. Since health behavior patterns of individuals can be modified, many studies have been conducted to investigate the ways to improve health behavior patterns in different populations. The majority of studies related to health behaviors and attitudes, however, have been conducted in industrialized Western societies; in contrast there has been limited number in less developed or developing countries, such as African and Asian countries [e.g. 5,6]. However, diseases constitute a more important antecedent of death in less developed or developing

countries [7], thus, there is a need for more studies which investigate factors underlying the unhealthy behavioral patterns of individuals in these regions. Also, many health promoting policies applied in developing countries have been established without considerations of culture-specific health attitudes, values and behaviors [8]. Thus, there is a need for public health studies that examine health behaviors and related psycho-social and cultural factors in less developed countries.

Besides health behaviors, safety-related behaviors (e.g. seat belt use, taking precautions to avoid possible work accidents) are also closely related to general well-being. Hence, both safety related and health-enhancing behaviors (e.g. having adequate sleep and healthy diet) have been studied within the same context by several previous studies [e.g. 9, 10, 11, 12]. For instance, seat belt use was found to be positively correlated with certain health-enhancing behaviors, indicating a manifestation of a healthy lifestyle [11, 13]. Similarly, in a previous study [9], traffic violations, such as ignoring red lights, clustered with health compromising behaviors, such as alcohol consumption and unsafe sex. These findings suggest that general health attitudes influence both health and safety-related behaviors, which tend to be correlated.

Demographic variables, such as gender, age, educational levels, and socio-economic status (SES), influence an individual's health behaviors and health status, e.g. whether the individual has chronic illness or not. Regarding gender differences, although women live longer than men, they more frequently experience sickness [14]. Women's advantage in mortality has been decreasing recently mainly due to increased smoking rates [15]. Women are also less likely to have health insurance, or are more likely to be insured via their husbands' employers than their own, which leads to irregular health coverage [2]. Age is another important variable that relates to differences in health status, behaviors and attitudes. Both frequency of illnesses and use of health care services tend to decline in adolescence and young adulthood. However, these often increase in later adulthood along with the emergence of chronic illnesses [e.g. 16]. Lower income and low levels of educational and occupational attainment increase the likelihood of exposure to different kinds of stressors, such as inadequate housing, lack of vital goods and services, inadequate access to health services, poor sanitation, and also exposure to environmental pollutants and hazards [17].

In addition to demographic variables, quality of life is also linked to health behaviors [19, 20, 21]. Lower quality of life is associated with health-compromising behaviors, such as smoking [20] and insufficient sleep [21]. In contrast, a high health-related quality of life including a good physical, mental, emotional and social functioning is associated with health-enhancing behaviors, such as engaging in physical exercise [19]. Hence, in order to gain a clear understanding of health behaviors, it is important for public health researchers to examine individuals' quality of life.

Turkey is a developing country with a large population, and a substantial growth rate. According to Turkish Statistical Institute [22], in 2013 Turkish population included 76 481 847 people (50.2% males, 49.8% females), and people aged between15-64 constitutes the biggest portion (67.8%) of the population, followed by people aged between 0-14 (24.5%) and people aged above 65 (7.7%). Health statistics related to the general population show that coronary heart disease and cerebrovascular problems are the leading causes of death in Turkey [23], a country which has one of the highest ratios in Europe for these health problems [24]. Causes of the high rates of mortality and morbidity for coronary heart disease include low levels of total and high-density lipoprotein (HDL) cholesterol, a high prevalence of regular smokers, and obesity. Obesity is particularly common among Turkish women, which in turn may cause hypertension and diabetes [25]. All these risk factors and high coronary heart diseases are related with unhealthy dieting patterns and sedentary life style of Turks. Also, average longevity in Turkey is 73.7 years, less than many Western countries, such as the US (77.9) [26]. An overall lack of prioritization of health, an inadequate health-care system, and low SES are among the causes of the generally poor health status of the Turkish population.

Aims of the study

Although there are studies examining specific health behaviors, such as breast self-examination and physical exercise participation in Turkish samples [28, 29], more studies that specifically focus on psycho-social factors related with health behaviors in Turkey are needed. Also, there is a need for studies that investigate the relation between quality of life and health behaviors in general population. Hence, the present study aimed to investigate the relationship of demographic variables, quality of life and seat belt use with health behaviors in a Turkish sample.

The specific aims of the study were:

1) To investigate the primary health-seeking behaviors of the participants for physical health problems (e.g. problem with physical and sexual health).

2) To investigate the primary health-seeking behaviors of the participants for psychological health problems.

3) To examine the psycho-social factors related

to health behaviors. In particular, to examine the role of demographic variables, health-related variables (i.e. Body Mass Index, existence of a chronic illness), quality of life, and seat belt use in predicting health behaviors (sleep, healthy diet, and physical exercise).

METHOD

Sampling and procedure

The sample consisted of 270 Turkish respondents from different age and occupation groups. For the demographic characteristics of the sample, see Table 1. Data was collected via a self-completion questionnaire survey from two of the most populous cities of Turkey: Izmir (n=230) and Istanbul (n=40) between 2010 and 2012. Two hundred seventy out of 450 questionnaires were returned, resulting in a response rate of 60%.The data were collected by volunteer undergraduate psychology students trained by the authors in regard to the structure of the questionnaire, interviewing techniques, and the necessary ethical codes, such as confidentiality. The students collected the data by using convenient sampling. The inclusion criteria for the respondents were to be Turkish citizens between the ages of 17-75, fluent in Turkish. Before responding to the questionnaire, all the respondents gave an informed consent for the study. Completion of the questionnaire took approximately 30 minutes.

Table 1. Demographic characteristics of the sample

	%	M	SD
Age		36.6	13.3
Year of education		13.1	3.4
Sex			
Male	39		
Female	61		
Marital status			
Married	49		
Single	45		
Other	6		
Job status			
Working	45		
Housewife	3.3		
Retired	5.2		
Student	16.1		
Unemployed	1.5		
Monthly Income (TRY)			
<750	5.6		
751-1500	18.4		
1501-2500	21.2		
2501-4000	23.7		
>4000	26.8		
Driving license			
Yes	74		
No	26		

Instruments

Data collection was conducted using a self-developed questionnaire, which included items related to demographic information, health-related practices (e.g. use of traditional medicine), health-seeking behaviors for different health problems (e.g. for a physical health problem), health-compromising behaviors (e.g. smoking), health background (e.g. history of chronic illnesses, inherited illnesses, and health insurance), the Medical Outcomes study short form- 36 (SF-36) [30], and the Health Behavior Questionnaire [31].

Health-seeking behaviors were measured by three items asking about the first thing to do when they experience a physical, mental and sexual health problem. Response alternatives included consulting a doctor, using medicines available at home, consulting a pharmacist, applying traditional healing methods, consulting family and friends, taking no action, searching the internet, and other actions.

The Health Behaviors Questionnaire [31] consisted of nine items related to healthy diet-sleep (e.g. I have breakfast every morning; I sleep at least six hours every night); and four items to physical exercise (e.g. I have a paced walk in the open air at least twice a week). Before developing the Health Behaviors Questionnaire, a literature review was made to obtain background information about common protective health behaviors and health-enhancing behaviors. After being evaluated by two academics, the scale was found to have face validity and clarity. Previously it was found that, the health behaviors scale yielded in two factors, labeled as healthy diet & sleep (Cronbach's alpha= 0.79) and physical exercise (Cronbach's alpha= 0.60) [30]. In addition, items related to seat belt use both in front and back seats of the cars (e.g. As a front seat passenger I use my seat belt) were measured as health-related traffic behaviors. Scores ranged from 1 (never) to 5 (always), with higher scores indicating healthier and safer behaviors. Composite scores of health behaviors and seat belt use were calculated.

The Medical Outcomes study short form- 36 (SF-36) [30] consists of eight subscales to evaluate different domains of health-related quality of life (HRQOL): 1) physical functioning (PF); 2) role limitations due to physical health problems (RP); 3) bodily pain (BP); 4) social functioning (SF); 5) general mental health (psychological distress and psychological well-being) (MH); 6) role limitations due to emotional problems (RE); 7) vitality (energy/ fatigue) (VT); 8) general health perceptions (GH). The total score varies between 0 and 100, with higher scores representing a higher quality of life. The validity and reliability of SF-36 for Turkish population have been tested by Demirsoy [32]. For the present study physical and

mental health summary scores were calculated and used.

RESULTS

Health-related profile and health-seeking practices of the respondents

The data were analyzed at the beginning of 2013. Results showed that the vast majority of the respondents had a health insurance, and the majority was without chronic illness. Almost one third were smokers; the majority of these (69%) were considered light or moderate smokers consuming a maximum 1-15 cigarettes a day, while the rest were considered heavy smokers consuming at least one package of cigarettes per day. More than half were of normal weight, whereas the next most numerous groups included the overweight participants (See Table 2).

Table 2. Health related information of the participants

	%
Chronic illness	
Yes	31
Health insurance	
Yes	94
Smoking	
Yes	30
Level of smoking	
Light and moderate	69
Heavy	32
Alcohol consumption	
Yes	62.3
Level of alcohol consumption	
Low and moderate	86
High	14
Body Mass Index (BMI)	
Underweight	4.7
Normal	58.9
Overweight	27.9
Obese	8.5
When do you have a physical health problem, what do you do first?	
I go to hospital.	53
I use the medicine that I have at home.	16
I ask a pharmacist.	3
I use traditional treatment methods.	2
I ask my relatives/friends.	5
I take no action.	14
I search the internet.	7
When do you have a psychological problem, what do you do first?	
I go to a psychiatrist.	17
I go to a psychologist.	20
I ask a pharmacist.	.4
I use traditional treatment methods.	.8
I ask my relatives/friends.	13
I take no action.	29
I search the internet.	7
Other	13
When do you have a problem related with your sexual health, what do you do first?	
I go to a physician.	65.3
I ask a pharmacist.	0.4
I use traditional treatment methods.	0
I ask my relatives/friends.	6.4
I take no action.	10.4
I search the internet.	16.3
Other	1.2
Have you ever used a traditional treatment method?	
Yes	25

The respondents were asked what they would do first when experiencing a mental, physical, and sexual health problem. In regard to mental health problems, instead of consulting an expert, such as a psychiatrist or a psychologist, a large proportion preferred to take no action or apply some alternative approaches, such as consulting friends or a pharmacist (See Table 2). On the other hand, for problems related to physical or sexual health, most stated that they would immediately seek out a physician. Application of traditional treatment methods was only reported by 25% of the participants.

Predictors of health behaviors

A hierarchical multiple regression analysis using the enter method were conducted to identify the factors related to health behaviors. In the first block, demographics (i.e. age, education level, and gender) were entered into the analysis as control variables. In the second block, health-related variables (i.e. Body Mass Index, existence of a chronic illness, and smoking frequency), and in the third block mental and physical health summary scores of the SF-36 were entered into the analysis. In the final block seat belt use items were entered to the analysis to examine whether health-related traffic behavior improves the model. The total score of the Health Behavior Scale entered as a dependent variable. Results show that age, mental health and seat belt use were positively, and smoking frequency was negatively related to engaging in health behaviors. Health-related variables and quality of life variables (mental and physical health) explained most of the variance in the model (see Table 3).

DISCUSSION

In the present study, health status, health-seeking practices and factors related to health behaviors in a Turkish sample were examined. In terms of the health status, only one quarter of the participants reported a chronic illness, a ratio lower than expected [33] and most of the participants had normal BMI. These results are probably related to the relatively young age of the respondents. In accordance with previous studies, almost all of the participants had a health insurance [28, 34, 35] indicating that most had an opportunity to seek out treatment and professional health consultations when experiencing a health problem. Additionally, one quarter was smokers, in accordance with previous studies in Turkey [36, 37]. For a physical or sexual health problems, almost half of the respondents stated that they would visit a physician. In contrast, for mental health problems, only one fifth indicated that they would consult a psychologist/psychiatrist, and about one third reported taking no action. These findings indicate that mental help-seeking is at significantly lower level than physical health- seeking among the study respondents. This might be because of the negative stereotypes related to mental illnesses, and the fear of being stigmatized as mentally ill by society [38, 39, 40, 41]. Additionally, the second most reported response in the case of sexual health problem was searching the internet, which could also indicate a potential fear of stigmatization and reluctance for face to face health-seeking in this area.

Table 3. Predictors of health behaviors

Block	Indicators	Standardized *B*	Adjusted R^2	R^2 change	F-change
1			.24	.28	7.04***
	Gender	-.02			
	Eduaction	-.09			
	Age	.47***			
2			.33	.12	3.55*
	Body Mass Index	-.14			
	Frequency of Smoking	-.27*			
	Chronic Illness	.07			
3			.41	.09	4.64*
	Physical Health	.09			
	Mental Health	.27*			
4			.45	.04	4.68*
	Seat belt use as a passenger	.24*			

Dependent variable= Sum score of health behaviors, higher scores indicate higher frequency of engaging in health behaviors.

***p<0.001, *p<0.05

In this study health behaviors were made up of three components: healthy diet, sleep, and physical exercise. An examination of predictors of these health behaviors revealed that age, mental health and seat belt use were positively, and smoking frequency was negatively related to health behaviors. Similarly, previous studies [42, 43, 44] also indicated that mental health, especially positive emotions, such as optimism and absence of depression can be important determinants of health. The stronger relationship of mental health to health behaviors compared to physical health may be due to the relatively young age (M=36.6), and therefore relatively good health of our participants. This result indicates that mental health may play a more important role than physical health for health behaviors among young adults. Also, age was found as a predictor of health behaviors, such that health behaviors increased with age. This finding is also in concordance with previous findings which indicate that compared to younger people, older people have more responsible attitudes toward their health in regard to diet, regular sleep, tobacco and alcohol consumption [45], and exercise more [46]. Younger participants engaged in less health behaviors, probably because they do not have serious health problems, and also the unique invulnerability, "*a belief that bad things including death, happen to other people*" [47] has a protective function over them.

In line with the previous findings [48], participants who engaged in health behaviors were more likely to be non-smokers in the present study. Although many previous studies found a relation between gender and health behaviors [49] our results did not reveal a significant effect of gender on health behaviors. Also, in line with the earlier studies reporting a correlation between health-enhancement behaviors and seat belt use [11, 13], seat belt use was positively related to health behaviors in the present study. These findings suggest that healthy behaviors tend to accompany safe traffic behaviors.

Overall, the results related with smoking, seat belt use and health behaviors may be linked to the presence of a general healthy life-style among individuals. Those who engage in healthy behaviors in one domain, such as health, tend to show similar patterns also in other domains, such as traffic safety.

Limitations of the study

The small sample size can be considered as one limitation of the present study. This study was planned as a preliminary to a further study with a larger, nationally representative sample, therefore the sample size was considered as adequate for its specific purpose. The data were collected only from İzmir and İstanbul, thus, low representativeness of the data can be considered as another limitation. However, data were collected from different parts of İzmir and İstanbul, the two most populous cities of Turkey, both with high internal migration rates. Therefore, it is likely that the sample is fairly representative of the population across the country.

CONCLUSIONS AND IMPLICATIONS

The present study indicates that Turkish individuals are more likely to seek conventional health care for physical health issues. The results imply that when the problem is related with mental health, the participants are more reluctant to seek professional health care. Therefore, reducing the stigma toward mental health problems should be considered as an important issue in Turkey. Younger age, low level of seat belt use and smoking frequency were negatively related to engaging in health behaviors, therefore it is important that public health campaigns promoting health behaviors in Turkey target younger people with unhealthy life styles. Also, in order to increase the frequency of health behaviors, improving mental health of individuals seems essential. A further study with a nationally representative sample will be of greater value in determining needs, and therefore contributing to the direction of the country's future health policies.

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