

# Smoking Habits of the Final Grade Students at Atatürk University in Erzurum, Turkey

Türkiye'deki Erzurum Atatürk Üniversitesi Son Sınıf Öğrencilerinin Sigara Kullanma Alışkanlıkları

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## ABSTRACT

**Introduction:** The World Health Organisation has declared that smoking is the biggest health problem, since over four million people die because of it every year and it causes much harm. The assumption that all over the world, including Turkey, about 45% of the population over 15 years old has a smoking habit on a very serious scale reveals how important the problem is for the young population.

**Material and Method:** This study was carried out to determine the smoking status of the final grade students at Atatürk University in the 2003-2004 academic year. A questionnaire form developed by the researchers was used as the data gathering tool.

**Results:** It was found that 42.0% of the participants had smoked (continuous and occasional smoking). The age of onset of smoking was mainly between 14 and 21 years. There was a statistically strong association between duration of smoking, starting time, and smoking amount ( $p<0.001$ ), including the association between age of onset and smoking status of the students ( $p<0.05$ ). Of the students, 22.1% stated that they did not know why they started smoking. Their main answers were; 56.5% of them stated they smoked to relieve their stress feelings, 24.6% stated they smoked for pleasure.

**Conclusion:** Cigarette are widely used by university students. The reason why the students started smoking was mostly fellowship environment, and the reason for continuing to smoke was mostly to relieve stress. (*Tur Toraks Der 2008;9:93-8*)

**Key words:** Smoking, university student, Erzurum, Turkey.

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## ÖZET

**Giriş:** Her yıl 4 milyon kişinin sigara yüzünden ölmesi ve sigaranın pek çok zarara yol açması nedenleriyle Dünya Sağlık Örgütü dünyadaki en büyük sağlık sorununun sigara olduğunu ilan etmiştir. Tüm dünyada ve ülkemizde 15 yaşın üzerindeki nüfusun % 45'inin ciddi boyutlarda sigara bağımlısı olduğu varsayımı, sorunun özellikle gençlik açısından ne denli önemli olduğunu gösterir.

**Gereç ve Yöntem:** Bu çalışma 2003-2004 öğretim dönemi içinde Atatürk Üniversitesi son sınıf öğrencilerinin sigara kullanma durumunu belirlemek amacı ile yapılmıştır. Araştırmacılar tarafından geliştirilen anket formu veri toplama aracı olarak kullanılmıştır.

**Bulgular:** Öğrencilerin % 42.0' sinin sigara kullandığı (sürekli ve ara sıra) bulunmuştur. Sigaraya ilk olarak başlama yaşları çoğunlukla 14-21 yaşları arasındadır. Öğrencilerin sigara kullanma durumları ile ilk başlama yaşı arasında ( $p<0.05$ ), sigara kullanma durumları ile sigara miktarı, başlama zamanı ve kullanma süreleri ( $p<0.001$ ) arasında istatistiksel olarak güçlü bir ilişki vardır. Öğrencilerin % 22.1' i niçin sigaraya başladıklarını bilmediklerini belirtmişlerdir. Onların ana cevapları; % 56.5' i stresimi azaltıyor, % 24.6' sı keyifleniyorum şeklinde olmuştur.

**Sonuç:** Sigara üniversite öğrencileri tarafından yaygın bir şekilde kullanılmaktadır. Öğrencilerin sigaraya başlama nedenleri çoğunlukla arkadaş çevresidir ve sigarayı devam ettirme nedenleri ise çoğunlukla stresi azaltmasından dolayıdır.

(*Tur Toraks Der 2008;9:93-8*)

**Anahtar sözcükler:** Sigara kullanımı, üniversite öğrencileri, Erzurum, Türkiye

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## INTRODUCTION

Smoking dependence is the most important and frequently encountered toxicomania type. A cigarette is easier to obtain than alcohol, cocaine, and other drugs. It is widely and legally available for sale in Turkey from the age of 18 years [1]. Cigarette use can reduce the mean lifetime, increase the rate of permanent disability and

discontinuity at work. In addition, annual medical care costs for smokers are greater than for non smokers [2].

Cigarette use is one of the most important preventable health problems worldwide [3,4]. The World Health Organisation (WHO) reported that nearly five million people died from tobacco-related diseases annually. The WHO concluded that tobacco use is a major and widely

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prevalent risk to health [5]. While currently each year, five million people die from cigarette smoking, this number is expected to reach ten million by 2030. According to the data provided by the Ministry of Health, 12 people die prematurely in an hour, 300 a day, and nearly one hundred thousand each year in Turkey from cigarette smoking ([www.sigarasiz.com](http://www.sigarasiz.com)) [6]. In a study representative of the whole country carried out in 1988, it was reported that in Turkish society, 68.2% of men above 15 years, 24.3% of women, and 43.6% of the whole population are active smokers [7]. The assumption that all over the world, including Turkey, about 45% of the population over 15 years has a smoking habit on a very serious scale reveals how important the problem is for the young [8]. It is also known that all over the world, among adult men smoking habit is very common, it was seen that, in recent years this habit has become increasingly common among working women especially among the pre-adult group, and this is representative of the whole country [2,6,9,10].

The smoking rate in Turkey and most countries in the world is consistently rising among university students [10-16].

The aim of the educational role, one of the basic roles of the nursing profession today, is to give individuals, families and communities information, behaviour patterns and manners that will improve and protect their health, in accordance to their needs and in a planned way. The basis for all kinds of efforts to develop a healthy lifestyle standard is health education. In this process, the role of the nurse is of key importance [17]. When it is considered that the mean age of smoking onset is 11 throughout the world, it is vital that the young be taught about the dangers of smoking. Being the greatest number among the health care professionals, nurses undertake an important role in the struggle against smoking [18,19].

This study was carried out to determine the smoking status of the final grade students at Atatürk University during the 2003-2004 academic year.

#### **MATERIAL AND METHOD**

This study was conducted on final grade students in the 2003-2004 academic year at Atatürk University. The subjects of this descriptive study were identified as 3,522 final grade students from 16 faculties and high schools in Atatürk University. These 16 faculties and high schools were divided into three groups: Health, Social and Natural and Applied Sciences. Participants were equally divided into the three groups. The sampling size was calculated as 1251 subjects. This was adjusted to the number of the students in each faculty and proportioned to the classroom layers using the layered random sampling method, and the number of students to be interviewed in each classroom was decided. The students to be interviewed were determined applying the random numbers table on the student name lists provided by the faculties and high schools. The selected students were informed about the content of the study and their consent was obtained. Among them, 41 were unwilling to participate in the study because of time shortage and the study was carried out with 1210 students from each three groups.

As the data gathering tool, a questionnaire form was used. This questionnaire form was developed by the researchers reviewing the related literature [1,2,8,14]. It was piloted with twenty students in older groups to judge the time needed for administration and to test for clarity and logical flow. The questionnaire form consisted of 29 questions, 13 of which were formulated to identify the characteristics of the students and 16 aimed to determine their thoughts about smoking.

All data management and statistical analysis were performed using SPSS 10 for the windows program. In the evaluation, percentage, mean, and chi-square significance tests were used.

#### **RESULTS**

Descriptive characteristics of students, smoking, non-smoking, occasional smoking, and total samples are shown in Table 1. In the study, it was found that 42.0% of the participants had smoked (continuous and occasional smoking). The mean age of the students was found to be  $23.11 \pm 1.81$  years. There was a statistically strong association between the gender, monthly income, presence of smokers in the living places and smoking status of their fathers and friends, and the smoking status of the students included ( $p < 0.001$ ). There was a statistically significant association between the economic levels ( $p < 0.05$ ), educational level of fathers ( $p < 0.05$ ), vital status of parents ( $p < 0.05$ ), places of residence ( $p < 0.01$ ), and smoking status of the students included. The smoking status of the students was not significantly different according to the educational level of mothers, family type, migration status of the family, and smoking status of mothers ( $p > 0.05$ ).

Information about smoking of the students in the smoking, occasional smoking and total samples are presented in Table 2. There was a statistically strong association between duration of smoking, starting time, and smoking amount and the smoking status of the students included ( $p < 0.001$ ). There was also a statistically strong association between age of onset and smoking status of the students included ( $p < 0.05$ ).

Of the students, 22.1% stated that they did not know why they had started smoking. When they were asked the reasons why they smoked at present in addition to the starting reasons, their answers were as follows: 56.5% of them stated they smoked to relieve their feelings of stress, 24.6% stated they smoked for pleasure and 14.1% stated they did not know the reason (Table 3).

#### **DISCUSSION**

The 42.0% prevalence of smoking in this study was similar to the previous studies: 66.0% smoking by 780 in Turkish university students [11], 58.3% smoking by 614 African American university students [20], 49.0% smoking by 1564 in New Zealand university students [15], 44.0% smoking by 1146 university students [22], 42.5% smoking by 1474 in Turkish university students [22].

In this study, there was a statistically strong association between smoking and gender. This is

**Table 1.** Descriptive characteristics of students in the smoking, non-smoking, occasional smoking, and total samples

Descriptive Characteristics	Smoking (n=441) n (%)	Non-smoking (n=702) n (%)	Occasional smoking (n=67) n (%)	Total sample (N=1210) n (%)	P ( $\chi^2$ test)
<b>Gender</b>					
-Female	105 (22)	338 (71)	29 (6)	472 (100)	.000
-Male	336 (46)	364 (49)	38 (5)	738 (100)	
<b>Monthly income</b>					
-Less than 50 YTL	7 (17)	32 (76)	3 (7)	42 (100)	.000
-50-100 YTL	41 (25)	116 (71)	5 (3)	162 (100)	
-100-150 YTL	93 (31)	180 (61)	23 (8)	296 (100)	
-150 NTL and over	300 (42)	374 (53)	36 (5)	710 (100)	
<b>Economic Levels</b>					
-Low	23 (29)	48 (61)	8 (10)	79 (100)	.012
-Middle	215 (33)	398 (61)	38 (6)	651 (100)	
-High	185 (42)	240 (54)	20 (4)	445 (100)	
-Very high	18 (51)	16 (46)	1 (3)	35 (100)	
<b>Educational Level of Fathers</b>					
-Illiterate	11 (31)	21 (58)	4 (11)	36 (100)	.024
-Literate	23 (49)	19 (40)	5 (11)	47 (100)	
-Primary school graduate	118 (31)	244 (65)	16 (4)	378 (100)	
-Secondary or high school graduate	175 (39)	248 (55)	26 (6)	449 (100)	
-University	114 (38)	170 (56)	16 (5)	300 (100)	
<b>Educational Level of Mothers</b>					
-Illiterate	74 (35)	122 (58)	13 (6)	209 (100)	NS
-Literate	46 (41)	62 (55)	5 (4)	113 (100)	
-Primary school graduate	177 (33)	323 (61)	30 (6)	530 (100)	
-Secondary or high school graduate	112 (42)	144 (54)	13 (5)	269 (100)	
-University	32 (36)	51 (57)	6 (7)	89 (100)	
<b>Vital Status of Parents</b>					
-Having both	384 (36)	630 (58)	66 (6)	1080 (100)	.046
-Having only mother	37 (39)	56 (60)	1 (1)	94 (100)	
-Having only father	16 (62)	10 (39)	--	26 (100)	
-Having neither	4 (40)	6 (61)	--	10 (100)	
<b>Family type</b>					
-Core Family	353 (35)	590 (59)	56 (6)	999 (100)	NS
-Large Family	71 (39)	102 (56)	10 (6)	183 (100)	
-Divorced Parents	9 (64)	4 (29)	1 (7)	14 (100)	
-Remarried father	2 (100)	--	--	2 (100)	
-Remarried mother	6 (50)	6 (50)	--	12 (100)	
<b>Place of residence</b>					
-Living with friends	113 (37)	179 (59)	12 (4)	304 (100)	.004
-Living with family	85 (28)	189 (63)	25 (8)	299 (100)	
-Living in dormitory	237 (41)	316 (54)	29 (5)	582 (100)	
-Living with relatives	6 (24)	18 (72)	1 (4)	25 (100)	
<b>Migration status of the family</b>					
-Migrant	89 (42)	109 (52)	13 (6)	211 (100)	NS
-Not migrant	352 (35)	593 (59)	54 (5)	999 (100)	
<b>Presence of smokers in places of residence</b>					
-Present	364 (42)	444 (52)	52 (6)	860 (100)	.000
-Absent	77 (22)	258 (74)	15 (4)	350 (100)	

Descriptive Characteristics	Smoking (n=441) n (%)	Non-smoking (n=702) n (%)	Occasional smoking (n=67) n (%)	Total sample (N=1210) n (%)	P (t or $\chi^2$ test)
<b>Smoking status of fathers</b>					
-Never smoked	65 (28)	157 (67)	11 (5)	233 (100)	.000
-Gave up smoking	132 (33)	251 (62)	23 (6)	406 (100)	
-Smoking at present	203 (45)	228 (50)	25 (5)	456 (100)	
-Sometimes smoking	41 (36)	66 (57)	8 (7)	115 (100)	
<b>Smoking status of mothers</b>					
-Never smoked	317 (36)	513 (59)	44 (5)	874 (100)	NS
-Gave up smoking	46 (43)	53 (50)	7 (7)	106 (100)	
-Smoking at present	44 (36)	71 (58)	8 (7)	123 (100)	
-Sometimes smoking	34 (32)	65 (61)	8 (7)	107 (100)	
<b>Smoking status of friends</b>					
-All of them	56 (55)	38 (38)	7 (7)	101 (100)	.000
-Most of them	220 (52)	181 (43)	23 (5)	424 (100)	
-Some of them	157 (27)	389 (67)	35 (6)	581 (100)	
-None of them	8 (7)	94 (90)	2 (2)	104 (100)	

NS, Statistically no significant difference between the group of smoking, non-smoking and occasional smoking (P<.05). P value, [chi]<sup>2</sup> test (two-sided) between the group of smoking, non-smoking and occasional smoking within students

**Table 2.** Information about smoking in the smoking, occasional smoking, and total student samples

Information about smoking	Smoking (n=441) n (%)	Occasional smoking (n=67) n (%)	Total sample (N=508) n (%)	P ( $\chi^2$ test)
<b>Age of onset</b>				
-13 and under	48 (89)	6 (11)	54 (100)	.013
-14-17	180 (92)	16 (8)	196 (100)	
-18-21	190 (84)	37 (16)	227 (100)	
-22 and over	23 (74)	8 (26)	31 (100)	
<b>Duration of smoking</b>				
-0-1 year	16 (39)	25 (61)	41 (100)	.000
-2-4 years	120 (83)	24 (17)	144 (100)	
-4-6 years	145 (93)	11 (7)	156 (100)	
-7 years and more	160 (96)	7 (4)	167 (100)	
<b>Starting Time</b>				
-Primary school	16 (76)	5 (24)	21 (100)	.000
-Secondary school	86 (93)	7 (8)	93 (100)	
-High school	213 (91)	20 (9)	233 (100)	
-University	126 (78)	35 (22)	161 (100)	
<b>Smoking amount (packet/ day)</b>				
-1-10 cigarettes (half a packet)	121 (67)	61 (34)	182 (100)	.000
-11-20 cigarettes (a packet)	211 (98)	5 (2)	216 (100)	
-21-30 cigarettes (1 or 1,5 packet)	79 (99)	1 (1)	80 (100)	
-31-40 cigarettes (1,5 or 2 packets)	25 (100)	- -	25 (100)	
-40 cigarettes or more (2 packets or more )	5 (100)	- -	5 (100)	

NS, Statistically no significant difference between the group of smoking, non-smoking and occasional smoking (P<.05). P value,  $\chi^2$  test (two-sided) between the group of smoking, non-smoking and occasional smoking within students

supported by the findings from earlier studies [15,23-26]. In the study, the rate of students smoking with a monthly income of more than 150 NTL was found to be 47.2%, while that of those with a monthly income less than 50 NTL was 23.7%. This reveals that, among the students, the higher the monthly income, the more prevalent smoking is. For that reason, it may be expected that there is a statistically significant association between monthly income and smoking. This result is supported by the findings from the studies of Ceylan et al. [11], Saatçi et al. [26] and Arbak et al. [27]. In many previous related studies carried out all over the world, including Turkey, it was seen that a member of family or friend who smokes plays an important encouraging role in an individual's starting to smoke [9,11,16,26,28-33]. It was determined in the study that 48.3% of the subjects who had at least one close individual smoking smoked, while 26.2% of them did not smoke. This finding shows that being in an environment where smoking people are present contributes to smoking. The smoking status of students whose economic levels are high (45.9%) and very high (54.2%) was higher than that of those whose economic levels are middle (38.8%) and low (39.2%). In this study, where a statistically significant association between monthly incomes and smoking status of the students was found, these two findings are consistent with each other. This is supported by the findings from earlier studies [11,27]. The fact that the smoking percentage is lower among people whose economic levels are not high, compared to those in economically high-level groups may show that monetary concerns make cigarette purchasing difficult, added to the effects of consistently rising prices. Despite the fact that, in this study, the smoking status of students whose fathers' educational levels are high was lower than that of

**Table 3.** Reasons for starting and continuing to smoke

	Counts	%*
<b>Reasons (n=508)</b>		
<b>Starting Reasons</b>		
Friendship environment	295	58.1
Not known	112	22.1
Stress, problems	80	15.7
Willing to feel their adolescence	22	4.3
Family problems	12	2.3
Presence of smoking members in family	9	1.7
Death of a relative	9	1.7
Famous people who smoke	5	0.9
<b>Smoking Reasons</b>		
To relieve stress feelings	287	56.5
To have pleasure	125	24.6
Not known	72	14.1
As habit	30	5.9
For its stimulating effect on attention	12	2.3
Not to get fat	12	2.3
To try its taste	12	2.3
To confirm his/her independence	11	2.1
Enjoying smoking	10	1.9

\*More than one answer was taken. In percentages, n was taken as 508

others, a statistically significant difference being found ( $p < 0.05$ ), acceptance of smoking as a social norm was found to be high for all the education levels [3,5,6]. In the study, a statistically significant association between the vital status of parents and their smoking status was found ( $p < 0.05$ ). Since the death of mother or father or both is an event affecting a family seriously, youths may start smoking during this stressful experience. While the highest smoking percentage, 41.1%, was found among the students who stayed with friends at a flat, the lowest percentage, 28.0%, was found among those staying with relatives. This finding is another indicator that the smoking status of students is affected greatly by fellowship environment.

There was no statistically significant association between the education and smoking status of the mothers and the smoking status of the students in the study ( $p > 0.05$ ). This finding may show that youths, as the members of a patriarchal society in our country, accept their fathers as role models rather than their mothers. Although there was no statistically significant association between the family types and smoking status ( $p > 0.05$ ), smoking percentage was higher among students with divorced or remarried parents compared to those having a core family. Because no association between the migration status of the families and smoking status of the students was found ( $p > 0.05$ ), it may be said that students are not greatly affected by environmental changes.

Participants reported that they mostly started smoking between 18-21 and 14-17 years of age. This finding was similar to the previous studies which found that the mean age when students first tried smoking was

14.5 [11], 15.2 [21], 13.9 [31]. These are the ages when students are at high school and university. When the students were asked the starting time for smoking, most of them answered this was at high school and university. This supports the finding mentioned above (smoking age of onset). Smoking prevalence among the students who finish high school and start university is related to the effect of breaking away from the control of families and environments and being in a relatively more freely acting environment [28, 30, 31]. In the USA, more than 80% of smokers start smoking under the age of 18 years. It was often observed that smoking starting time overlaps the ages when the youths start university or finish high school [14, 15, 23]. The risk of developing cancer for those smoking a packet a day is ten times more than for those not smoking, while this risk is twenty five times more for those smoking two packets a day than those not smoking ([www.goguscerrahisi.com](http://www.goguscerrahisi.com)) [34].

Reasons for starting or continuing to smoke may be unique to each individual, but studies on this topic show that people smoke to relax or relieve their stress, often in a stressful and boring environment where people are under some form of pressure, while at happy hours and friend meetings they smoke for pleasure or because of taking someone else as a model [16,28,35,36].

## REFERENCES

- Doğan YB. Alcohol and other than alcohol substance addiction. In: Dilbaz HN, Eds. *Addiction Concept and Understanding*. 1st ed. Ankara: Mutlu Doğan Ofset Matbaacılık, 1998:1-8.
- Dramalı A, Özen Ş, Özbayır T, et al. Evaluation of the smoking status of health staff and their role in smoking. *Proceedings of the 2nd National Nursing Congress*. 1990 Sep 12-14; Atatürk Kültür Merkezi, İzmir: Ege University Press; 1990. p. 726-33.
- Lacchetti C, Cohen J, Ashley MJ, et al. Is nicotine dependence related to smokers' support for restrictions on smoking? *Nicotine Tobacco Research* 2001;3:257-60.
- Walker SN, Sechrist KR, Pender NJ. The health-promoting lifestyle profile: development and psychometric characteristics. *Nursing Research* Accessed on Jan 24, 2006 1987;36:76-81.
- World Health Organization. WHO statistical information system. <http://www.who.int/whosis>. Accessed on Jan 24, 2006.
- Cigarette and community. [http://www.sigarasiz.com/sigara\\_top.htm](http://www.sigarasiz.com/sigara_top.htm). Accessed on Jan 24, 2006.
- Turkish Health Ministry. Smoking habits and attitudes of Turkish population towards smoking and antismoking campaigns. Turkey: Turkish Health Ministry, PIAR, January 1988.
- Peşken Y. Reasons and epidemiology of smoking, passive smoking. In: Tür A, Eds. *Effects of Smoking on Health and Giving up Methods*. 1st ed. Samsun: Logos Publishing, 1995:1-28.
- Koivula M, Paunonen M. Smoking habits among Finnish middle-aged men: experiences and attitudes. *JAN* 1998; 27:327-34.
- Siegel M, Biener L. Evaluating the impact of statewide anti-tobacco campaigns: the Massachusetts and California tobacco control programs. *Journal of Social Issues* 1997;53:147-68.
- Ceylan E, Yanık M, Gencer M. The factors affecting the behaviours of the students to smoking, who were registered in Harran University. *Toraks Dergisi* 2005;6:144-50.



12. Pinar Ç, Esen A, Yorgancıoğlu A, et al. High-school Students' behaviours' smoking in the city of Manisa. *Toraks Dergisi* 2000;1:61-6.
13. Effects of smoking on youths. <http://www.sigara.gen.tr/genclik/index.html>. Accessed on Jan 06, 2006.
14. Gottlieb J. Smoking rises sharply among US university students. *BMJ* 1998;317:405.
15. Kypri K, Baxter J. Smoking in a New Zealand university student sample. *N Z Med J* 2004;12:117(1190):U794.
16. Fadiloğlu Ç. Studying the smoking habits of the students at Nursing School in Ege University. *Journal of Nursing School, Ege University* 1985;1:23-30.
17. Akın M. Needs of health education on harms of substance abuse among high-school students. 4th National Nursing Training Symposium Books. 1997 Sep 10-12; Kıbrıs. İstanbul: Çevik Publishing, 1997. p. 117-20.
18. Chalmers K, Seguire M, Brown J. Tobacco use and baccalaureate nursing students: a study of their attitudes, beliefs and personal behaviours. 2002;40:17-24.
19. Dore K, Hoey J. Smoking practices, knowledge and attitudes regarding smoking of University hospital nurses. *Canadian Journal of Public Health* 1988;79:170-4.
20. Hestick H, Perrino SC, Rhodes WA, et al. Trial and lifetime smoking risks among african american college students. *Journal of American College Health* 2001;49:213-9.
21. Sotomayor H, Behn V, Cruz M, et al. Prevalence of smoking among academic, non-academic workers and students of the University of Concepcion. *Revista Medica De Chile* 2000;128:977-84.
22. Metintas S, Sariboyaci MA, Nuhoglu S, et al. Smoking patterns of university students in Eskisehir, Turkey. *Public Health* 1998;12:261-4.
23. Bilir N, Doğan BG, Yıldız AN. Behaviours and attitudes on smoking. Hacettepe Public Health Association Publications Number: 7. Ankara:1997, p.1-9.
24. Çelik P, Esen A, Yorgancıoğlu A, et al. Behaviours of high-school students in the city of Manisa to smoking. *Toraks Dergisi* 2000;1:61-6.
25. Sekijima K, Seki N, Suzuki H. Smoking prevalence and attitudes toward tobacco among student and staff nurses in Niigata, Japan. *Tohoku J Exp Med* 2005;206:187-94.
26. Saatci E, Inan S, Bozdemir N, et al. Predictors of smoking behavior of first year university students: Questionnaire survey. *Croatian Med Journal* 2004;45:76-9.
27. Arbak P, Erdem F, Karacan Ö, Özdemir Ö. Smoking habits of students at Düzce High-school. *Solunum* 2000;2:17-21.
28. Metintaş S, Sariboyacı MA, Nuhoglu S. Features of smoking habits of university students in the city of Eskişehir. *Tuberculosis and Thorax* 1996;44:77-83.
29. Göksel T, Cirit M, Bayındır Ü. The factors affecting the smoking habits of the students at high schools in the city of İzmir. *Toraks Dergisi* 2001;2:49-53.
30. Blackford KA, Bailey PH, Couto-Wakulczyk GM. Tobacco use in northeastern Ontario teenagers: prevalence of use and associated factors. *Can J Public Health* 1994;85:89-92.
31. Nuno-Gutierrez BL, Alvarez-Nemegyei J, Madrigal-de Leon E, et al. Prevalence and factors linked to tobacco consumption by high school adolescents in Guadalajara, Jalisco, Mexico. *Salud Mental* 2005;28:64-70.
32. Erbaycu AE, Aksel N, Çakan A, Özsöz A. Smoking habits of health staff in the city of İzmir. *Toraks Dergisi* 2004; 5:6-12.
33. Shaw M, Mitchell R, Darling D. Time for a smoke? One cigarette reduces your life by 11 minutes. *BM* 2000;320:53.
34. Smoking and its Harms. <http://www.goguscerrahisi.com/Sigara1.html>. Accessed Jan 06, 2006.
35. Çelik HC, Satıcı Ö, Çelik MY. Analysis of the variables of the attitudes of university students having chronic smoking habits with gradual grouping method. *Journal of Medicine Faculty İnönü University* 2004;11:217-22.
36. İlhan F, Aksakal FN, İlhan MN, Aygün R. Smoking Status of students at Medicine Faculty in Gazi University. *Protecting Medicine Bulletin of Turkish Army Staff* 2005;4:188-98.