



# Journal of Applied Sciences

ISSN 1812-5654

**science**  
alert

**ANSI***net*  
an open access publisher  
<http://ansinet.com>

## Opinions of Turkish University Students on Cigarette Smoking at Schools

<sup>1</sup>Esra Keloglu-İşler and <sup>2</sup>İrfan Erdogan

<sup>1</sup>Faculty of Communication, Selcuk University, Konya, Turkey

<sup>2</sup>Faculty of Communication, Gazi University, Ankara, Turkey

**Abstract:** Cigarette smoking among college students is a critical public health problem with serious personal and social consequences. This study examined college student opinions about smoking in the student cafeteria, hallways and offices, considering smoking as freedom of choice, complying with the cigarette law and policy of universities on smoking. A sample of 1527 students (53.9% female, 46.1% male) attending to the six prestigious universities in Ankara, Turkey, completed a ten-item questionnaire. Results of the study showed that nonsmoking students reported the most favorable opinions toward the issues questioned, whereas occasional smokers and regular smokers reported the least favorable opinions. The highest level of disagreement by smokers and nonsmokers was provided for banning cigarette smoking in the cafeteria. Students generally agreed on that teachers should not smoke in the classrooms and in their offices with doors open. Recommended actions include campus-wide no-smoking policies embracing indoors and outdoors and identification and use of new ways of providing smoking prevention and cessation programs and services.

**Key words:** College students, cigarette use, smoking, smoking policy, Turkish students

### INTRODUCTION

There are frightful statistics about the results of tobacco use, which is the greatest single preventable cause of premature mortality in the world. Although tobacco use has been declining over the past several decades recent evidence shows an increase in smoking and tobacco rates, especially among adults aged 18 to 25 (Stockdale *et al.*, 2005; Arnett, 2005). Most smokers report initiating smoking in adolescence, typically around age 14, however, estimates indicate that between 8 and 25% of adult smokers report initiating smoking or using tobacco products after entering college. Despite the widespread knowledge about the serious health effects of smoking, the college years have been characterized as a time of increased risk to smoking initiation as well as movement from intermittent or social smoking to more regular patterns of use (Moran *et al.*, 2004; Nichter *et al.*, 2006; Staten and Ridner, 2007). Studies report that smoking among college students is on the increase (Lantz, 2003; Stockdale *et al.*, 2005; Harakeh *et al.*, 2007).

Studies found numerous reasons for smoking such as identity confusion, sensation seeking and greater instability of life experiences, psychological distress, stress reduction, depression, life satisfaction, coping style, curiosity and pleasure. Other contributing factors include parental smoking patterns and attitudes (De Vries *et al.*, 2003), gaining power and

status (Emmons 1998; Plumridge *et al.*, 2002), visibility of smoking on campus, lack of restrictions on smoking, presence of social imitation and ease of purchasing cigarette. Some smokers also express value orientations such as freedom, independence, maturity and defiance of authority. Much research has established strong link between social influences and the behavior of smoking (Colby *et al.*, 2005). Emerging adults who are prone to substance use may establish friendships with similar others and encourage substance use within their social network (Kypri *et al.*, 2004) and develop and keep friendships that maintain substance use (Kobus, 2003). Specifically, a strong, positive correlation between peers who smoke or peers who pressure others to smoke and the smoking status of an individual has been established repeatedly in the literature (Maziak and Mzayek, 2000; Castrucci *et al.*, 2002; Stockdale *et al.*, 2005; Krukowski *et al.*, 2005; Harakeh *et al.*, 2007).

Intensive tobacco marketing strategies targeting students are also important contributing factors for increased smoking. As information on the health hazards of smoking increased, the new avenues of smoking are opened and encouraged. Tobacco company marketing expenditures have been increasing, involving point-of-sale marketing, sampling events and other promotions such as sponsoring trendy social events at which free cigarettes are often distributed. Most of these events occur in bars and clubs and at on-campus social events.

There has been a revival of old methods of tobacco use known to have bad health consequences. Cigars and narghile (waterpipe) smoking places were added to the café houses inside and around the campuses.

Legislation to control smoking in public places typically focuses on minimizing and eventually eliminating the risks of involuntary exposure to tobacco smoke and protects the rights of nonsmokers to a smoke-free environment. However, this legislation also appears to deter students from smoking, by conveying the idea that smoking is socially unacceptable as much as hazardous. Smoke-free environments also reduce smoking and provide support to the large numbers of smokers who want to quit. Furthermore, smoke-free environments improve public safety by reducing the risk of fire (Anderson and Hughes, 2000). Examining the college student opinions of no-smoking policies, some studies found that nonsmoking students reported the most favorable attitudes toward no smoking. Male students who are current smokers reported the least favorable attitudes. The lowest level of agreement by all subgroups was provided for prohibiting smoking everywhere on campus (inside and outside of buildings) (Loukas *et al.*, 2006). Significantly more nonsmokers supported “smoking should be banned in my school” than did smokers and significantly more smokers supported “restriction” than did nonsmokers (Suzuki *et al.*, 2005).

The rise in cigarette smoking among students is a growing public health, education and social relations concern, especially in developing countries where efforts to prevent smoking are severely inadequate. Turkey has the highest smoking rate in Europe and the third highest rate in the world (Koumi and Tsiantis, 2001). Cigarette, like drinking tea and coffee, is an integrated part of the daily life and socializing experience in Turkey. The thick smoke of cigarettes often seems like a natural part of the country's landscape and indoors (Schleifer, 2006). In Turkey, people are heavily exposed to smoke almost everywhere, including outdoors like train stations, bus stations, picnic areas and outdoor cafeterias in schools. The prevalence of smoking is very high in Turkey, ranging between 30 and 63% (Aytaclar *et al.*, 2003; Bilir *et al.*, 1997; Alikasifoglu *et al.*, 2002; Cooper *et al.*, 2004; Akvardar *et al.*, 2004; Aslan *et al.*, 2006). For instance, Yilmaz *et al.* (2005) reported that men smoke at a rate of 63% and women 24%, with rates remaining consistent in urban and rural areas in Turkey. There is an increasing trend of smoking prevalence from the first year to the last at Turkish universities. For example, smoking prevalence was found to be 12.0% among the first year pharmacy students of Hacettepe University and the prevalence increased to 17.5% in the last year

(Yeegenoglu *et al.*, 2006). In another study, the smoking prevalence among the last year university students was found to be higher (49.8%) than the first year students (34.0%) (Aslan *et al.*, 2006). Senol *et al.* (2006) found that 22% of medical students were smoking in the first year of study, a rate that had risen to 27% by the sixth year. Roughly one-third (32.3%) of Senol *et al.* (2006) original nonsmokers in the first year had also become smokers by the end of the sixth year at medical school (Smith and Leggat, 2007).

The rapid growth in various laws restricting or banning smoking do not have significant effect on tobacco/cigarette use (Ringel *et al.*, 2005). Smoking regulations generally are accepted because they reflect and encourage a new norm of civility (USA Today, 1993; Halperin and Rigotti, 2003). Contrarily, an irrational opposition against state intervention on smoking through regulations can be seen among some university students and university teachers in Turkey. Instead of having a new norm of civility, there is a pervasive legitimization of smoking by relating it with individual freedom that even tobacco industries have promoted with caution.

Laws like the cigarette law are mostly drawn from the reforms Turkish rulers have been implementing or pretending to implement in the political and economic spheres as part of its drive to join the European Union. The cigarette law is not enforced at all. One of the excuses given by the university administrations for not enforcing the law is that the law provides a highly complex and impractical mechanism of writing and collecting fines from offenders. Indeed, it is a law that creates a situation in which no one can enforce the law if a smoker does not obey. However, if there is a will to do, there is always a way.

Cigarette policies may help deter students from developing or continuing cigarette smoking habits. Little is known about the extent to which Turkish universities have adopted cigarette free university policies or which factors encourage or impede their adoption. Furthermore, there is no organization or NGO actively involved in recommending and promoting cigarette control policies for the universities. No organization or group of academicians manifestly recommends that the universities prohibit the sale, advertising, sampling and distribution of tobacco products on their campuses and prohibit smoking in all campus buildings, including cafeterias. It seems like it is out of question to think about restricting smoking outside the buildings. No one recommends that smoking should be banned at all university and faculty-sponsored indoor and outdoor events. There is no genuine effort toward the goal of eradicating tobacco smoking in the university environment.

Despite studies such as those described and problems discussed above, previous research in Turkey about students have generally been restricted to one or two faculties, universities and health facilities and mostly focused on smoking behavior of medical students. Little is known about the opinions of university students on cigarette usage at schools. Besides, in the face of apparently lack of interest of responsible parties toward meeting objectives on smoke-free environment and the increasing cigarette use by young people in Turkey and many other countries, important questions remain unanswered. The objective of this study was based on the idea that academicians, university administrators and other interested parties should be aware of the urgency and magnitude of the problem and opinions of students and should contribute to the initiation of appropriate prevention and early intervention programs. Therefore, the present study, which was designed as an exploratory research, assessed the opinions of students on the following issues in order to provide some further insights for academics and policy makers:

- General distributional character of smoking of students,
- Cigarette use in the student cafeteria and school corridors,
- Cigarette use of teachers in the classrooms and in their offices with open doors,
- Complying with the cigarette law,
- School administration's policy on enforcing the cigarette law,
- Considering cigarette smoking as an expression of individual freedom.

## MATERIALS AND METHODS

Study sample consisted of 1527 students from two private and four public universities in Ankara. These universities (Gazi University, Hacettepe University, Middle East Technical University, Bilkent University, Baskent University and Ankara University) are among the most prestigious schools in Turkey.

Data were collected in February, March and April 2007 by using one-page questionnaire that included 10 questions and contained forced-choice components. The questions were focused on the following issues: Students' opinion about (1) teachers' smoking behaviors which are defined as smoking office doors open and smoking inside classrooms (2) smoking in the school corridors and student cafeteria (3) complying with the cigarette law (4) the school administration's policy on enforcing the law (5) considering cigarette smoking as expression of individual freedom.

Univariate analyses were used for determining the distribution of responses in each variable. Bivariate analyses were utilized to assess the statistical significance. Frequency distribution for univariate analyses and Chi-square for bivariate analyses were used, because all variables were categorical. Level of significance for bivariate comparisons was set as 0.01.

## RESULTS

Almost one third of 1527 students (32.6%) smoked regularly, 14.0% smoked occasionally and 53.4% did not smoke.

**Gender:** 46.1% of respondents were males and 53.9% were females. There were significant differences at 0.01 level between sexes on every item tested. Of regular smokers, 41.4% were females and 58.6% were males. Females smoked about fifteen percent less than males (25.1 and 41.4%). More females demanded that teachers should not be allowed to smoke in the classrooms (86.5 and 73.8%) and should keep their doors closed while smoking (71.5 and 59.4%). More females than males (83.4 and 67.4%) were inclined to demand that the law should be enforced by school administrations. Similar differences were observed in terms of complying with the law (90.08 and 78.5%) and not smoking in the hallways (76.0 and 60.8%) and cafeteria (60.7 and 50.4%).

**Academic classification:** Students reported their academic status as freshman (26.8%), sophomore (25.3%), junior (22.4%) and senior (25.5%). Statistical test result did not support the expectation that smoking rate would be less at the first year and would change at the later years (Table 1). This result is mostly due to the distribution of the occasional smokers. The cross sectional data showed that 29.0% of the first year students smoked regularly and this rate was 34.8% among the seniors.

**Smoking in the school corridors and student cafeteria:** As the data in Table 2 show, little over two thirds of the students reported that smoking should not be allowed at the corridors. Most of nonsmokers (91.5%), two thirds of occasional smokers (67.1%) and one third of regular smokers (33.0%) did not approve smoking in the corridors.

Little over half of the students (56.0%) reported that smoking should not be allowed in the cafeteria. There was significant difference between smokers and nonsmokers (Table 3). Most nonsmokers (81.1%) agreed that smoking in the cafeteria should not be allowed, whereas 49.8% of occasional smokers and 82.7% of regular smokers disagreed.

**Table 1: Distribution of students according to their academic status**

Status	Regular smokers	Occasional Smokers	Non-smokers	Total
	----- (%) -----			N
Freshman	29.0	13.5	57.5	393
Sophomore	31.6	14.6	53.8	370
Junior	32.9	13.7	53.4	328
Senior	34.8	13.6	51.6	374
<b>Total (%)</b>	<b>469 (32.0)</b>	<b>203 (13.9)</b>	<b>793 (54.1)</b>	<b>1465 (100.0)</b>

$\chi^2 = 3.608, df = 6, p = 0.730$

**Table 2: Opinions on smoking in the school corridors**

Categories	What do you think about smoking in school corridors?		Total N
	Should not be allowed	Should be allowed	
	----- (%) -----		
Regular smokers	33.0	67.0	497
Occasional smokers	67.1	32.9	213
Nonsmokers	91.5	8.5	814
<b>Total (%)</b>	<b>1052 (69.0)</b>	<b>472 (31.0)</b>	<b>1524 (100.0)</b>

$\chi^2 = 494.815, df = 2, p = 0.001$

**Table 3: Opinions on smoking in the student cafeteria**

Categories	What do you think about smoking in the cafeteria?		Total N
	Should not be allowed	Should be allowed	
	----- (%) -----		
Regular smokers	17.3	82.7	496
Occasional smokers	50.2	49.8	213
Nonsmokers	81.1	18.9	811
<b>Total (%)</b>	<b>851 (56.0)</b>	<b>669 (44.0)</b>	<b>1520 (100.0)</b>

$\chi^2 = 511.651, df = 2, p = 0.001$

**Complying with the cigarette law:** Most students (84.7%) were in favor of enforcement of the cigarette law. Nevertheless, there was statistically significant difference among the students ( $\chi^2 = 242.102, p = 0.001$ ). Almost all nonsmokers (96.4%) and most occasional smokers (86.8%) responded that it was not right to smoke indoors despite the law. Little over one third of smokers (35.4%) were not inclined to respect the law.

**Cigarette smoking as an expression of individual freedom:**

Three quarters of students did not consider smoking as an expression of individual freedom (Table 4). Regular smokers, occasional smokers and nonsmokers differed significantly on the issue of freedom. 83.0% of nonsmokers indicated that smoking is not an expression of individual freedom. 35.7% of occasional smokers and 41.6% of regular smokers thought conversely. There was also a significant difference ( $\chi^2 = 8.828, p = 0.003$ ) between sexes: 31.4% of males and 24.5% of females reported considering smoking as freedom of choice.

**Students' opinion about teachers' smoking behavior:**

Most students did not approve teachers smoking in the classrooms; 80.6% of students reported that smoking

**Table 4: Opinions on considering smoking as freedom of choice**

Categories	Is smoking an expression of individual freedom?		Total N
	Yes	No	
----- (%) -----			
Regular smokers	41.6	58.4	493
Occasional smokers	35.7	64.3	213
Nonsmokers	17.0	83.0	812
<b>Total (%)</b>	<b>419 (27.6)</b>	<b>1099 (72.4)</b>	<b>1518 (100.0)</b>

$\chi^2 = 100.890, df = 2, p = 0.001$

**Table 5: Opinions on teachers' smoking in the classrooms**

Categories	What do you think about teachers' smoking in the classroom?		Total N
	Should not be allowed	Should be allowed	
	----- (%) -----		
Regular smokers	58.8	41.2	497
Occasional smokers	78.8	21.2	212
Nonsmokers	94.6	5.4	812
<b>Total (%)</b>	<b>1227 (80.7)</b>	<b>294 (19.3)</b>	<b>1521 (100.0)</b>

$\chi^2 = 254.375, df = 2, p = 0.001$

**Table 6: Opinions on teachers' smoking in their offices**

Categories	What do you think about teachers' smoking their office doors open?		Total N
	Doors should be closed	Doors should be open	
	----- (%) -----		
Regular smokers	43.8	56.3	496
Occasional smokers	64.9	35.1	211
Nonsmokers	79.8	20.2	811
<b>Total (%)</b>	<b>1001 (65.9)</b>	<b>517 (34.1)</b>	<b>1518 (100.0)</b>

$\chi^2 = 177.992, df = 2, p = 0.001$

**Table 7: Opinions on the policy of administration on enforcing the law**

Categories	What do you think about school administration for not enforcing the law?		Total N
	Should enforce	Should not enforce	
	----- (%) -----		
Regular smokers	45.0	55.0	496
Occasional Smokers	78.8	21.2	212
Nonsmokers	94.3	5.7	812
<b>Total (%)</b>	<b>1156 (76.1)</b>	<b>364 (23.9)</b>	<b>1520 (100.0)</b>

$\chi^2 = 413.172, df = 2, p = 0.001$

should not be allowed in the classrooms. However, opinions differed significantly across the three groups (Table 5). Nonsmokers showed more favorable opinions than did occasional and regular smokers toward the smoking in classrooms (94.6, 78.8 and 58.8%, respectively).

Similar results were obtained on teachers' smoking in their rooms with doors open (Table 6). The opinion of 65.9% of students was that the office doors should be closed while smoking. There were significant differences at 0,001 level among nonsmokers (79.8%), occasional smokers (64.9%) and smokers (43.8%).

### **School administration's policy on enforcing the law:**

Findings indicated that three quarters of students wanted the cigarette law enforced (Table 7). Most nonsmokers showed favorable opinion toward enforcing the law (94.3%), followed by occasional smokers (78.8%). Over half of the smokers (55.0%) reported unfavorable opinions.

### **DISCUSSION**

College students comprise the single largest group accessible to the marketing and promotion campaigns of the tobacco industry. Tobacco companies have therefore used a variety of marketing strategies to sell their products to this population, focusing on their social activities to make tobacco use an integral part of the school environment (Ling and Glantz, 2002; Moran *et al.*, 2004). Prevention and control efforts aimed at this age group, however, have not been noteworthy. The rationale of this study is that understanding the opinions of college students about smoke-free educational environment and the smoking behaviors of friends, teachers and acquaintances can help policy makers to develop effective prevention and control programs. Hence, this study attempted to make some contributions by examining the opinions of students from six universities in Ankara.

Supporting the findings of similar studies (Loukas *et al.*, 2006), this study found that students generally displayed favorable opinions toward necessity of law enforcement and smoke-free indoors. Findings further suggest that interventions aiming at preventing student smoking through the legal sanctions would not be appropriate for this age group, as long as there is no proper enforcement and education. Disapproval of the complete prohibition of smoking in all public places of a campus seems that some students do not see harm from their or others' cigarette use. Some students, especially smokers, may alternatively believe that smokers have the right to use tobacco and that this right should be extended to some areas of the college campus. Therefore, it seems that students (especially smokers) have a more personal than a general concern (e.g., public health, social and environmental consequences) towards smoking. Smokers retain what is relevant to them personally and have little, or only moderate interest and sensitivity toward others and smoke-free environment.

To address the rise in tobacco use among students, it appears that universities should enact smoking bans in and around all campus buildings, including student housing and prohibit the sale, advertisement and promotion of tobacco products on campus stores. A policy prohibiting smoking in universities could protect

nonsmokers from exposure to environmental tobacco smoke (second hand smoking). It might also discourage smoking initiation and help smokers who are trying to quit avoid temptation. Confirming Aslan *et al.* (2006) findings, this study's findings underline the fact that early university years are important to carry out anti-smoking activities for preventing students from starting smoking. Reducing the visibility of tobacco use in the environment could also discourage students from starting to smoke and make quitting easier (Wechsler *et al.*, 2001; Halperin and Rigotti, 2003).

Unfortunately, observations in the campuses during the administration of this research and other times lead to a bleak picture: Universities do not take this problem seriously. No university categorically prohibits smoking in all buildings and provides systematic education about tobacco use. University and faculty administrators' efforts to respond to the smoking are almost nonexistent. They establish some commissions that do little or nothing. They provide rarely any education or campaign that is informative about the smoking and tobacco industry. They generally post a few "no smoking" or warning signs. Teachers who gather in their offices (doors always open) and students who come together in cafeterias chat almost all day while smoking and drinking tea and coffee. In short, there is very little concern among some teachers and students about the health consequences for themselves and other people who are exposed to smoke and there is no comprehensive policy and intervention designed to discourage students (and teachers) smoking at universities in Turkey. As Halperin and Rigotti (2003) indicated the lack of anti-smoking policies is most likely to contribute to a college environment that supports tobacco use rather than helping students avoid using tobacco in the first place or supporting them in their efforts to quit smoking.

The university years appear to be a time of transition in smoking behavior, with many college students beginning to smoke regularly during college and others who began smoking before coming to college attempting to quit. New approaches need to be identified to help students at these various points of transition. For example, students who are occasional smokers may need programs to prevent them from becoming nicotine-dependent. College health centers can be an important source of assistance in smoking cessation attempts by providing smoking cessation programs and motivating students to take advantage of the programs. Unfortunately, Turkey needs professional health educators who can create tobacco cessation programs that attract students and proper administrative culture that vigorously addresses tobacco use.

Although the current study extends prior research by examining the opinions of college students on smoking practices and nonsmoking policies in university environment, there are some limitations and directions for future research. For instance, the present study was limited to a sample of students enrolled in selected universities. Additional research with nationally representative samples of college students is needed. The study questions were also limited to some specific issues and did not inquire about opinions regarding other tobacco use. The major aims of the future research should be to achieve truly international participation, foster discussion and promote cooperation among scientists, policy makers and peoples across geographical and disciplinary boundaries.

### REFERENCES

- Akvardar, Y., Y. Demiral, G. Ergor and A. Ergor, 2004. Substance use among medical students and physicians in a medical school in Turkey. *Soc. Psychiatry Psychiatr. Epidemiol.*, 39: 502-506.
- Alikasifoglu, M., E. Erginoz and O. Ercan *et al.*, 2002. Cigarette smoking among Turkish high school students. *J. Adolescent Health*, 30: 7-8.
- Anderson, P. and J.R. Hughes, 2000. Policy interventions to reduce the harm from smoking. *Addiction*, 95: 9-11.
- Arnett, J.J., 2005. The developmental context of substance use in emerging adulthood. *J. Drug Issues*, 35: 235-254.
- Aslan, D., N. Bilir, H. Ozebe, C. Stock and N. Kucuk, 2006. Prevalence and determinants of adolescent smoking in Ankara, Turkey. *Turk. J. Cancer*, 36: 49-56.
- Aytaclar, S., M. Erkiran, L. Kirisci and R. Tarter, 2003. Substance abuse and associated psychosocial risk factors among Turkish male adolescents. *Addict Behav.*, 28: 1419-1429.
- Bilir, N., B.G. Doğan and N.A. Yıldız, 1997. Smoking behavior and attitudes-Ankara, Turkey. Hacettepe Public Health Foundation and International Development Research Center. Ankara.
- Castrucci, B.C., K.K. Gerlach, N.J. Kaufman and J.T. Orleans, 2002. The association among adolescents' tobacco use, their beliefs and attitudes and friends' and parents' opinions of smoking. *Matern Child Health J.*, 6: 159-167.
- Colby, S.M., D.J. Drobes, J. David and R. West, 2005. International advances in nicotine and tobacco research. *Nicotine Tob. Res.*, 7: 667-709.
- Cooper, R., P. Gorcegiz, N. Akturk, S. Akyol and E. Pocari, 2004. Smoking habits of medical school students in Turkey: Has anything changed? *Turk. J. Cancer*, 34: 146-149.
- De Vries, H., R. Engels, S. Kremers, J. Wetzels and A. Mudd, 2003. Parents' and friends' smoking status as predictors of smoking onset: Findings from six European countries. *Health Educ. Res.*, 18: 627-636.
- Halperin, A.C. and N.A. Rigotti, 2003. US public universities' compliance with recommended tobacco-control policies. *J. Am. Coll. Health*, 51: 181-188.
- Harakeh, Z., R. Engels, A. Vermulst, H. De Vries and R.H.J. Scholte, 2007. The influence of best friends and siblings on adolescent smoking: A longitudinal study. *Psychol. Health*, 22: 269-289.
- Kobus, K., 2003. Peers and adolescent smoking. *Addiction*, 98: 37-55.
- Koumi, I. and J. Tsiantis, 2001. Smoking trends in adolescence: Report on a Greek school-based, peerled intervention aimed at prevention. *Health Promot Int.*, 16: 65-72.
- Krukowski, R.A., L.J. Solomon and S. Naud, 2005. Triggers of heavier and lighter cigarette smoking in college students. *J. Behav. Med.*, 28: 335-345.
- Kypri, K., D. McCarthy, M. Coe and S. Brown, 2004. Transition to independent living and substance involvement. *J. Child Adol. Subs. Abuse*, 13: 85-100.
- Lantz, P.M., 2003. Smoking on the rise among young adults: Implications for research and policy. *Tobacco Control*, 12: 60-70.
- Ling, P.M. and S.A. Glantz, 2002. Why and how the tobacco industry sells cigarettes to young adults: Evidence from industry documents. *Am. J. Publ. Health*, 92: 908-916.
- Loukas, A., M.R. Garcia and N.H. Gottlieb, 2006. Texas college students' opinions of no-smoking policies, secondhand smoke and smoking in public places. *J. Am. Coll. Health*, 55: 27-32.
- Maziak, W. and F. Mzayek, 2000. Characterization of the smoking habit among high school students in Syria. *Eur. J. Epidemiol.*, 16: 1169-1176.
- Moran, S., H. Wechsler and N. Rigotti, 2004. Social smoking among US college students. *Pediatrics*, 114: 1028-1034.
- Nichter, M., E.E. Lloyd-Richardson, B. Flaherty, A. Carkoglu and N. Taylor, 2006. Gendered dimensions of smoking among college students. *J. Adolescent Res.*, 21: 215-243.
- Plumridge, E.W., L.J. Fitzgerald and G.M. Abel, 2002. Performing coolness: Smoking refusal and adolescent identities. *Health Educ. Res.*, 17: 167-179.
- Ringel, J.S., J. Wasserman and T. Andreyeva, 2005. Effects of public policy on adolescents' cigar use: Evidence from the National Youth Tobacco Survey. *Am. J. Public Health*, 95: 995-998.
- Schleifer, Y., 2006. Turkish leaders push for smoking ban. *Chris. Sci. Monitor*, 1/9/2006, 98, Issue 30.

- Senol, Y., L. Donmez, M. Turkey and M. Aktekin, 2006. The incidence of smoking and risk factors for smoking initiation in medical faculty students: Cohort study. *BMC Public Health*, pp: 128.
- Smith, D.R. and P.A. Leggat, 2007. An international review of tobacco smoking among medical students. *J. Postgrad. Med.*, 53: 55-62.
- Staten, R.R. and S.L. Ridner, 2007. College students' perspective on smoking cessation: If the message doesn't speak to me, I don't hear it. *Iss. Mental Health Nur.*, 28: 101-115.
- Stockdale, M.S., H.L. Dawson-Owens and L.M. Sagrestano, 2005. Social, attitudinal and demographic correlates of adolescent vs college-age tobacco use initiation. *Am. J. Health Behav.*, 29: 311-323.
- Suzuki, K., T. Ohida, E. Yokoyama, Y. Kaneita and S. Takemura, 2005. Smoking among Japanese nursing students: Nationwide survey. *J. Adv. Nurs.*, 49: 268-275.
- USA Today Magazine, 1993. General compliance with smoking bans. August, 122, Issue 2579.
- Wechsler, H., K. Kelley, M. Seibring, M. Kuo and N.A. Rigotti, 2001. College smoking policies and smoking cessation programs: Results of a survey of college health center directors. *J. Am. Coll. Health*, 49: 205-212.
- Yegenoglu, S., D. Aslan and S.E. Erdener *et al.*, 2006. What is behind smoking among pharmacy students: A quantitative and qualitative study from Turkey. *Subst Use Misuse*, 41: 405-414.
- Yilmaz, G., C. Karacan, A. Yöney and T. Yılmaz, 2005. Brief intervention on maternal smoking: A randomized controlled trial. *Child Care Health Dev.*, 32: 73-79.