Smoking Behavior, Attitudes of Second-Hand Smoke, and No-Smoking Policies on a University Campus

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Abstract

Smoking, when condoned as socially acceptable, overtly establishes such behavior as normal and risk-free. Scientific evidence verifies that cigarette smoking pervasively damages the body, causes early death, costs billions of dollars annually in medical care for smokers, and poses serious health risks to nonsmokers exposed to secondhand smoke. Yet public policy makers are slow or reticent to create policies that reduce or eliminate smoking in public places. Such policies, in conjunction with financial barriers (taxes) and behavior change programs may be necessary to reduce the burden of smoking on the public and health care system. A convenience sample of 2,817 (40% male, 60% female) students, faculty, and staff at a commuter campus in the southwest United States volunteered to complete a 30 item anonymous survey on smoking attitudes and behaviors. Respondent attitudes of no-smoking policies and exposure to secondhand smoke with self-reported smoking behavior were examined. Analyses determined that nonsmokers had the most favorable attitudes towards non-smoking. Self-reported smoking behaviors significantly influenced attitudes. Those who self-identified as regular smokers had the least favorable attitudes. Support for a smoke-free campus was found, even among those who reported some smoking behavior. University policies can enhance non-smoking behaviors and improve smoking cessation rates.

Introduction

From 1995 to 1999, cigarette smoking caused early deaths of nearly 440,000 people in the U.S. (Centers for Disease Control and Prevention [CDC], 2004a). Additionally, smokers in the U.S. cost the nation $157.7 billion a year due to sickness, disability, and death caused by cancer, cardiovascular and respiratory diseases, and adverse reproductive effects. It is now known that smoking harms nearly every organ and system in the body. For nonsmokers, the health hazards of exposure to secondhand smoke (a Class-A carcinogen) include an increased risk of lung cancer and coronary heart disease (CDC, 2004b).

The National Center for Chronic Disease Prevention and Health Promotion (CDC, 2004b) has estimated that among nonsmoking adults who are exposed to secondhand smoke, about 3,000 die from lung cancer and 35,000 die from coronary heart disease every year in the United States. Additionally, the U.S. Environmental Protection Agency (2004) and the American Lung Association (2004) believes that cigarette smoke triggers asthma attacks in some individuals. Zollinger et al. (2004) determined that as a result of secondhand smoke, one American community experienced an economic loss of $53.9 million. Additionally, Anthonisen et al. (2005) found that smoking cessation programs improve survival rates from coronary heart disease, cardiovascular disease, and lung cancer for quitters.

One premise of this article is that smokers affect the quality of life on campuses by exposing unwilling students, faculty, and staff to the carcinogenic and asthma-inducing effects of secondhand smoke. Additionally, institutional factors that promote exposure to secondhand smoke include: lack of support to enforce any smoking policy, lack of intentional promotion of cessation, and lack of positive support networks.

Policy change is the most efficient means of establishing a healthy nonsmoking norm on campus (Wisotsky, Albuquerque, Pechacek & Park, 2004), and such action can ensure that those who are concerned about exposure to secondhand smoke are protected. Researchers (Moran, Wechsler & Rigotti, 2004; Orleans & Cummings, 1999; Wisotsky et al., 2004) found positive associations between social smoking policies and smoking behavior, more restrictive smoking policies reduced smoking behavior. A college campus that is smoke-free can negate the effects of tobacco marketing and change social norms to nonsmoking (Ling & Glantz, 2002; McGee & Glider, 2003).

Friedman, Smith, Zhang, Perry, and Colwell (2004) conducted a study among higher education public institutions in Texas to establish information on tobacco prevention programs on these campuses. The researchers found that smoking cessation programs were the most affordable, accessible, and successful means of providing university-based health services to address the growing rate of tobacco use among college populations. In the Texas Tobacco Prevention Pilot Initiative, researchers found that young adult smokers (ages 18-25) who utilized the American Cancer Society's telephone counseling service were the age group most impacted by increased, successful quit rates

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(Meshack, Pallonen, Hu, Rabius & McAlister, 2003). DeBernardo and Aldinger (1999) assessed undergraduate college students and discovered that 50% of the responding students began smoking after beginning college and that most of them began during the first or second year. Further, both smokers and nonsmokers expressed high interest in and wanted more information about the health hazards related to secondhand smoke exposure. These finding emphasize the importance of cessation and prevention programs on college campuses.

The purpose of this study was to examine college students', faculty and staff attitudes of second-hand smoke, smoking behavior, and no-smoking policies. The authors' anticipated that nonsmoking, older, and female respondents would have more favorable attitudes about non-smoking and more supportive of no-smoking policies, as found by others (Loukas, Garcia & Gottlieb, 2006; Rigotti, Regan, Moran & Weschler, 2003).

Methodology

Sample

Data were collected from a voluntary sample of students, faculty, and staff at the university between October 2004 and March 2005. The institutional review board approved the data collection for this study. Classrooms and public spaces served as data-gathering sites. In an attempt to expand opportunities for survey completion, an online survey at a university website was available for students, faculty, and staff in March 2005. Others (Gosling, Vazire, Srivastava, & John, 2004; Reece, Smith & Jun, 2006) found that web-based surveys were an acceptable method of gathering data and had no greater bias than traditional paper-pencil surveys.

At the time of the survey, the university population was estimated at approximately 28,000. The university demographics for 2004 reported 50% of the student population was 17-22 years of age. Of those enrolled as students, approximately 86% were undergraduates and 13% were graduate students. By gender, student enrollment was 54% female and 46% male. Finally, there were approximately 549 faculty and 4667 staff (University Demographics). Total respondents (N = 2,891) completed 1,541 surveys by hand and 1,350 online. Surveys with missing data were excluded from analyses. The majority of respondents were undergraduate students (65%, n=1889), followed by graduate students (6%, n=173), staff (4%, n=109), and faculty (2%, n=51. The age range of all respondents was 18 to 65 years (M=25, SD 8.19). Gender distribution indicated more females (60%, n=1,702) than males (40%, n=1130) responded to the survey.

Questionnaire

The 16 item questionnaire contained seven attitude items about exposure to second-hand smoke and smoking behaviors, as well as demographic questions (age, gender, and classification, i.e., freshman, sophomore, junior, senior, graduate, faculty, staff). As the majority of respondents were undergraduate students, these groups were combined into one category "undergraduates" so that classification was either undergraduate or graduate student, faculty or staff for analysis.

Three attitude questions asked about best methods to reduce exposure to second-hand smoke, i.e., smoking cessation programs, smoking areas, and permitting smoking within certain distances from campus buildings. Four questions asked about society's responsibility to protect people from second-hand smoke, concern about health consequences of exposure to second-hand smoke, litter caused by smoking, and support of a policy change to a smoke free campus. The behavior question asked respondents to identify themselves as a regular smoker, occasional smoker, one who smokes only around other smokers, one who smokes when drinking, or none of the above (nonsmoker). Respondents were asked to select the category that applied to them.

Attitude questions were scored on a Likert-type scale with score ranged from 1 (strong disagreement) to 5 (strong agreement). The number 3 indicated a neutral position on the statement of attitude. Therefore, a mean below 3 was considered a negative response, and a mean above 3 was considered a positive response. These attitude questions were classified as dependent variables. The independent variables were self-reported age, gender, classification, and smoking behavior.

The survey was pilot-tested with students and faculty prior to administration across campus. Test-retest reliability showed a Cronbach's alpha of .85. Alpha was set at .05. Missing data for individual items were not included in those specific analyses; therefore, the participant number is reported for each analysis.

Findings

A 2 (gender) x 4 (classification) x 3 (age category) multivariate analysis of variance (MANOVA) with each of the 7 items as dependent variables was used to test the hypothesis that nonsmoking, older, and female respondents would have more favorable attitudes about non-smoking and more supportive of no-smoking policies than the other groups. Wilks's lambda was significant for gender, $F(8, 2753) = 2.155, p<.05$, and classification, $F(24, 7985) = 2.155, p < .01$ but not by age category for the combined dependent variables. There were no 2 or 3 way interactions. Tables 1, 2, 3, and 4 present the descriptive statistics for each dependent variable and univariate F tests for gender, classification, age, and smoking status. Post hoc Scheffe' tests were conducted to determine where differences occurred. Findings for Scheffe' tests are also presented in Tables 1, 2 and 4. Where the F statistic was asymptomatically distributed, the Brown-Forsythe statistic was reported.

Overall, means by age, gender, and classification on questions were positive, indicating agreement with these

Table 1

Smoking Attitudes by Age

Survey question	n	M	SD	F df
2. As a society, we have a responsibilities to protect nonsmoking adults from exposure to secondhand smoke exposure	18-24 = 1,888 25-44 = 740 45-64 = 144	3.91 3.79 4.08	1.16 1.39 1.27	2.965* (3,637)[a]
4. Reducing exposure to secondhand smoke can best be achieved by developing programs for persons who smoke (such as education and quit tobacco programs)	18-24 = 1,887 25-44 = 740 45-64 = 142	3.47 3.56 3.63	1.21 1.28 1.26	2.854* (3,2883)
5. Reducing exposure to secondhand smoke exposure can best be achieved by permitting smoking only at certain entrances rather than all entrances to campus buildings.	18-24 = 1,885 25-44 = 739 45-64 = 144	3.64 3.39 3.39	1.36 1.55 1.59	5.898**¥ (3,544)[a]
6. Reducing exposure to secondhand smoke can best be achieved by not permitting smoking within certain distances from campus buildings.	18-24 = 1,884 25-44 = 740 45-64 = 144	3.83 3.77 4.10	1.30 1.48 1.32	2.504 (3,632)[a]
7. In general, I am concerned about the health consequences of secondhand smoke on this campus.	18-24 = 1,889 25-44 = 740 45-64 = 144	3.53 3.40 3.65	1.41 1.53 1.51	1.787 (3,594)[a]
8. Litter caused by smoking (cigarette butts, empty packages, etc.) detracts from the aesthetic appearance of this campus.	18-24 = 1,886 25-44 = 739 45-64 = 144	4.02 4.04 4.47	1.21 1.27 1.04	7.183**§ (3,692)[a]
9. How likely would you be to support a policy change to make this campus smoke-free.	18-24 = 1,880 25-44 = 736 45-64 = 143	3.54 3.48 3.73	1.47 1.68 1.63	1.053 (3,2872)

Note. § 45-64 year means differ significantly from 18-24 year means. ¥ 18-25 year means differ significantly from 25-44 year means.

[a]Asymptotically F distributed; Brown-Forsythe statistic.

*$p < .05$. **$p < .01$.

questions. Differences between age groups, gender, or classification varied by question.

Significant differences were found by age category (see Table 1) for the questions regarding society's responsibility, smoking cessation programs, permitting smoking only at certain entrances rather than all entrances to campus buildings, and litter caused by smoking. The oldest respondents (45-64 years) were more concerned about litter caused by smoking than youngest respondents (18-24 years). The youngest age category (18-24 years) were significantly more likely to agree that reducing exposure to secondhand smoke exposure can best be achieved by permitting smoking only at certain entrances rather than all entrances to campus buildings.

As seen in Table 2, more variation on the questions appeared by classification (undergraduate student, graduate student, faculty or staff). Significant differences were found between groups on all questions except smoking cessation programs. Graduate students agreed more than undergraduates' about society's responsibility, health concerns of second-hand smoke, and support of a smoke-free campus. Faculty means were significantly lower than undergraduate and graduate students on permitting smoking only at certain entrances rather than all entrances to campus

Table 2

Smoking Attitudes by Classification

Survey question	n	M	SD	F df
2. As a society, we have a responsibility to protect nonsmoking adults from exposure to secondhand smoke exposure.	UG = 2,499 G = 174 S = 108 F = 51	3.87 4.20 4.10 3.65	1.24 1.17 1.15 1.51	5.163** ¥ (3,198)[a]
4. Reducing exposure to secondhand smoke can best be achieved by developing programs for persons who smoke (such as education and quit tobacco programs)	UG = 2,498 G = 174 S = 109 F = 49	3.50 3.51 3.72 3.22	1.16 1.28 1.35 1.16	1.976 (3,2826)
5. Reducing exposure to secondhand smoke exposure can best be achieved by permitting smoking only at certain entrances rather than all entrances to campus buildings.	UG = 2,497 G = 173 S = 108 F = 50	3.56 3.55 3.56 2.88	1.42 1.51 1.56 1.61	3.131* ‡ (3,250)[a]
6. Reducing exposure to secondhand smoke can best be achieved by not permitting smoking within certain distances from campus buildings.	UG = 2,496 G = 173 S = 109 F = 51	3.80 4.03 3.75 4.07	1.36 1.34 1.22 1.45	2.858* (3,241)[a]
7. In general, I am concerned about the health consequences of secondhand smoke on this campus.	UG = 2,500 G = 174 S = 109 F = 51	3.47 3.86 3.79 3.24	1.45 1.37 1.39 1.67	5.641** ¥ (3,218)[a]
8. Litter caused by smoking (cigarette butts, empty packages, etc.) detracts from the aesthetic appearance of this campus.	UG = 2,498 G = 172 S = 109 F = 51	4.01 4.35 4.47 4.04	1.23 1.08 0.88 1.37	9.922** † (3,186)[a]
9. How likely would you be to support a policy change to make this campus smoke-free?	UG = 2,486 G = 173 S = 109 F = 51	3.49 4.09 3.86 3.53	1.53 1.45 1.52 1.76	9.359** ¥ (3,223)[a]

Note. UG = Undergraduate, G = Graduate, S = Staff, F = Faculty. ¥ graduate means differ significantly from undergraduate. ‡ faculty means differ significantly from undergraduate and graduate students. † undergraduate means differ significantly from graduate and staff.

[a]Asymptotically F distributed; Brown-Forsythe statistic.

*$p < .05$. **$p < .01$.

buildings. Undergraduate student means were significantly lower than graduate students and staff on the litter question.

All means by gender were above three, indicating agreement with all questions. Differences between males and females were significant for all but the litter caused by smoking question (see Table 3). Females indicated more agreement on these questions than males. Both males and females agreed that litter from smoking detracts from the aesthetic appearance of the campus.

Smoking behavior

Of participants in the survey, 76% indicated that they were nonsmokers (n=2184), 226 participants (8%) identified

Table 3

Smoking Attitudes by Gender

Survey question	n	M	SD	F df
2. As a society, we have a responsibility to protect nonsmoking adults from exposure to secondhand smoke exposure.	Male = 1,138 Female = 1,702	3.80 3.95	1.27 1.22	9.134** (1,2375)
4. Reducing exposure to secondhand smoke can best be achieved by developing programs for persons who smoke (such as education and quit tobacco programs)	Male = 1,135 Female = 1,703	3.42 3.57	1.26 1.22	9.943** (1,2376)
5. Reducing exposure to secondhand smoke exposure can best be achieved by permitting smoking only at certain entrances rather than all entrances to campus buildings.	Male = 1,136 Female = 1,700	3.47 3.60	1.44 1.43	5.863* (1,2416)
6. Reducing exposure to secondhand smoke can best be achieved by not permitting smoking within certain distances from campus buildings.	Male = 1,136 Female = 1,701	3.68 3.92	1.42 1.31	21.158** (1,2293)
7. In general, I am concerned about the health consequences of secondhand smoke on this campus.	Male = 1,138 Female = 1,704	3.33 3.62	1.48 1.42	28.233** (1,2360)
8. Litter caused by smoking (cigarette butts, empty packages, etc.) detracts from the aesthetic appearance of this campus.	Male = 1,137 Female = 1,701	4.07 4.04	1.21 1.22	0.272 (1,2458)
9. How likely would you be to support a policy change to make this campus smoke-free?	Male = 1,131 Female = 1,696	3.35 3.66	1.56 1.52	28.847** (1,2379)

*$p < .05$. **$p < .01$.

themselves as regular smokers, 188 participants (7%) identified themselves as occasional smokers, 237 participants (8%) reportedly smoke when they drink, and 45 participants (2%) responded that they smoke around other smokers.

To determine if smokers' responses differed from nonsmokers, additional ANOVAs were conducted of the seven attitude questions with smoking behavior as the independent variable (see Table 4). Respondents self-identified in to five categories, regular smoker, occasional smoker, one who smokes when drinks, one who smokes around other smokers, and does not apply (non-smoker).

As expected, regular smokers responded less favorably on all questions. Regular smokers were less likely to report being concerned about health consequences of second-hand smoke and to be least supportive of a smoke-free campus. Regular smokers responded slightly more favorably to society's responsibility for protecting non-smokers and most positively about litter detracting from the aesthetics of campus. Occasional smokers also responded less favorably on all question than other groups, but more favorably than regular smokers. Those who classified as smoking when drinking reported less concern for health consequences of second-hand smoke and less support for a smoke-free campus. Responses were more favorable than occasional and regular smokers and less than the other groups. The two remaining groups, smokes around other smokers and non smokers showed the most agreement on all questions and differed significantly most often from smokers in all other categories.

Discussion

The authors' anticipated that nonsmoking, older, and female respondents would have more favorable attitudes

Table 4

Smoking Attitudes by Smoking Status

Survey question	n	M	SD	F df
2. As a society, we have a responsibility to protect nonsmoking adults from exposure to secondhand smoke exposure.	Regular smoker = 226 Occasional smoker = 188 Smokes when drinks = 237 Smokes around other smokers = 45 Non smoker = 2,182	2.66 3.02 3.57 3.64 4.14	1.25 1.29 1.24 1.18 1.11	106.557** “ † ¥ ± ! (4,507) [a]
4. Reducing exposure to secondhand smoke can best be achieved by developing programs for persons who smoke (such as education and quit tobacco programs)	Regular smoker = 226 Occasional smoker = 186 Smokes when drinks = 236 Smokes around other smokers = 45 Non smoker = 2,183	3.55 3.02 3.27 3.29 3.69	1.33 1.26 1.23 1.25 1.16	53.322** § ‡ ¢ • £ (4,469) [a]
5. Reducing exposure to secondhand smoke exposure can best be achieved by permitting smoking only at certain entrances rather than all entrances to campus buildings.	Regular smoker = 226 Occasional smoker = 188 Smokes when drinks = 236 Smokes around other smokers = 45 Non smoker = 2,179	2.56 2.18 3.47 3.42 3.72	1.44 1.46 1.35 1.42 1.38	49.088** “ » Ø Ö !! (4,462) [a]
6. Reducing exposure to secondhand smoke can best be achieved by not permitting smoking within certain distances from campus buildings.	Regular smoker = 226 Occasional smoker = 188 Smokes when drinks = 234 Smokes around other smokers = 45 Non smoker = 2,182	2.77 2.86 3.43 3.69 4.07	1.46 1.45 1.37 1.22 1.23	79.558** “ † ¥ ± ! (4,562) [a]
7. In general, I am concerned about the health consequences of secondhand smoke on this campus.	Regular smoker = 226 Occasional smoker = 188 Smokes when drinks = 237 Smokes around other smokers = 45 Non smoker = 2,184	1.92 2.25 2.77 3.11 3.87	1.13 1.30 1.39 1.32 1.29	194.553** “ † ! (4,445) [a]
8. Litter caused by smoking (cigarette butts, empty packages, etc.) detracts from the aesthetic appearance of this campus.	Regular smoker = 226 Occasional smoker = 188 Smokes when drinks = 237 Smokes around other smokers = 45 Non smoker = 2,180	3.10 3.31 3.76 3.87 4.25	1.42 1.45 1.31 1.19 1.07	59.486** “ ¢ » Ø • ! (4,546) [a]
9. How likely would you be to support a policy change to make this campus smoke-free	Regular smoker = 225 Occasional smoker = 186 Smokes when drinks = 237 Smokes around other smokers = 44 Non smoker = 2,173	1.44 2.07 2.69 2.77 3.99	1.03 1.34 1.41 1.45 1.29	293.922** § † ¦ ! (4,365) [a]

Note. § Regular smoker means differ significantly from all other groups. “Regular and occasional smoker means differ significantly from all other groups. † Smokes when drink and around other smokers means differ significantly from regular, occasional, and nonsmokers. ¢ Smokes when drinks means differ significantly from regular and nonsmokers means. » Smokes when drinks means differ significantly from regular and occasional smokers. ‡ Occasional smokers means differ significantly from regular smokers and nonsmokers. Ø Occasional smokers means differ significantly from smokes when drinks and nonsmokers. ¦ Occasional smoker means differ signficantly from all other groups. ¥ Around other smoker means differ significantly from regular and occasional smokers. ± Around other smoker means differ significantly from all other groups. • Around other smoker means differ significantly from regular smokers. Ö Around other smoker means differ significantly from nonsmokers. ! Nonsmoker means differ significantly from all other groups. £ Nonsmoker means differ significantly from regular and occasional smokers and smokes when drinks. !! Nonsmoker means differ significantly from regular smoker means.

[a]Asymptotically F distributed; Brown-Forsythe statistic.

*$p < .05$. **$p < .01$.

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about non-smoking and more supportive of no-smoking policies, as found by others. Nonsmokers were significantly more likely to agree with all questions as were female respondents. Age was not as significant a factor in the analyses.

A majority of survey respondents indicated that they were concerned about the health hazards and the consequences related to secondhand smoke exposure. Others (CDC, 2004b; DeBernardo & Aldinger, 1999) have reported similar findings. The majority of respondents were undergraduate students and also nonsmokers. The majority of adults in the U.S. are also non-smoking (CDC, 2004a).

The respondents in the study indicated that they believe society has a responsibility to protect nonsmoking adults from exposure to secondhand smoke. Many smoking policies on university campuses stipulate that smoking is permitted 20 feet or more from entryways, doorways, or common paths of travel. However, ashtrays are often placed beside entryways to buildings. Moreover, building overhangs trap the smoke and concentrate it, making the air quality even poorer near doorways or entrances. Sidewalks and the paths that students, faculty, and staff commonly travel between buildings are qualified as common paths. Smokers may violate the rule regarding common paths of travel because they smoke while walking or within the designated distance of common paths that belong to and are shared by members of a campus community. If smokers violate the minimum distance, the violation is frequently not punished. Thus, lack of policy enforcement indicates an indirect support of smoking by the university administration. To increase non-smoking behavior, policies must be enforced.

Most respondents were concerned about the health consequences of secondhand smoke on the campus. As expected, regular and occasional smokers were less concerned. Interestingly, those who smoke only when around other smokers and those who smoke only when drinking were also concerned about exposure to second hand smoke. This suggests an avenue for interventions and a stimulus to increase prevention programs. Awareness programs that provide information about the hazards of smoking and second-hand smoke should be regularly conducted on campuses. Additionally, smoking cessation programs should also be offered at regular intervals each year.

A majority of the respondents agreed that the litter caused by smoking detracts from the aesthetic appearance of the campus. Even smokers were positive in their responses. The American Cancer Society Smoke-Free New England Campus Initiative (American Cancer Society, 2005a) indicates that universities, as proprietors of real estate, have the authority to determine use and maintenance of the property, particularly when considering the costs of clean up after smokers as well as the replacement costs of a fire caused by a smoker. Therefore, campuses should consider the aesthetics and the clean up costs when considering smoking policies.

The results indicate that not only nonsmokers but also many smokers were supportive of a policy change that would make the campus smoke-free. Others (Rigotti et al., 2003; Torabi & Seo, 2004; Wilson, Duncan, & Nicholson, 2004) have found similar results in attitudes about smoking bans.

Support for prevention is evident through policies which provide intentional prevention programs to increase awareness and knowledge about risks of smoking. No-smoking policies provide a clear message about an unhealthy behavior and are additive to cessation programs that provide skills to quit smoking and support for those involved. Positive opportunities exist and can further assist in implementation of a smoke-free policy. Many organizations provide support for policy change on college campuses. Healthy People 2010 (CDC, 2007) incorporate policies and legislation to enact smoke free environments for all schools, worksites, and public settings. The American College Health Association (2005), an organization that supports behavior change through policy intervention, embraces the U.S. Surgeon General's findings. It has adopted a tobacco-free policy which it encourages universities to use in accomplishing a smoke-free campus environment. Further, the American Cancer Society (2005a) Smoke-Free New England Campus Initiative is a program that helps colleges assume responsibility in preparing students for civic life. It promotes smoke-free campuses which foster healthy lifestyles that can positively affect a whole generation. A final example of an organization that supports policy change at colleges and universities is the Bacchus and Gamma Peer Education Network (2004) which promotes peer education on college and university campuses to foster wellness in areas such as tobacco and alcohol use. The association produced a comprehensive manual that guides campuses in the development of tobacco awareness campaigns and smoke free campus policies.

One challenge with implementing a policy change includes hiring additional public safety officers to enforce the policy. Issuing citations for policy violations requires additional resources. Citations can provide a small source of revenue and can be utilized in prevention and cessation

One challenge with implementing a policy change includes hiring additional public safety officers to enforce the policy. Issuing citations for policy violations requires additional resources.

techniques as a cost/benefit analysis. The cost of a citation is much greater than the cost of a pack of cigarettes.

To improve behavior change of smoking cessation, there are numerous resources to assist campus personnel. Many community organizations offer presentations on cessation as well as free individualized smoking cessation programs. These organizations may also help develop programs at the university, promote campus events, and provide volunteers. The state regional tobacco prevention office (Texas Department of State Health Services, 2005), provides many services including technical assistance to schools on tobacco use prevention issues and loans tobacco videos at no charge. There are many other cessation programs available, including quit lines, support groups, and cell phone text messaging (American Cancer Society, 2005b; American Lung Association, 2004; Asif, Jean-Mary, Obermayer, & Riley, 2004; Nicotine Anonymous, 2005; Stop Smoking Center; 2005).

Student health services fees generally provide smoking cessation means for students. However, there may be no such services for university personnel. The lack of programs for faculty and staff may be remedied through insurance benefits that provide medical resources for those who are insured through the university as well as community programs mentioned above.

The present study has several limitations; these include low response rate on the surveys (<10%) and possibly too short a timeframe for the online survey. This study nevertheless establishes the interest in a smoke free campus. The analyses confirm that a majority of the survey respondents were nonsmokers who support a smoke free campus. It is essential that the university contribute to the healthy lifestyle of its students, faculty, and staff by becoming smoke free.

Conclusion

A smoke free campus portrays an institution that is committed to a healthy image. The university, as a smoke free institution of higher learning, can serve not only as a positive role model for similar institutions but also for younger individuals who will be its future students. Importantly, academic achievement needs to be paired with preparing students for employment in a growing; smoke free business environment (American Cancer Society, 2005a). The university provides an important influence in building a well-educated base of citizens who need to be healthy in order to perform to their highest potential. It can play a significant role in cultivating healthy citizens who will assist the state and the Nation (CDC, 2007) in attaining goals of healthier individuals and a healthier society. By eliminating smoking as a critical, contributory factor to diseases such as cardiovascular disease, lung disease, diabetes, and cancer, the university will be recognized for caring about the health of the campus community and the community at large. In conclusion, enabling smoking on campus not only harms the campus community but also harms the community at large by promoting smoking as a norm.

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