

Societal Attitude towards Tobacco Smoking in a Cosmopolitan City of a Developing Country

AZRA PARVEEN AZAD* & M. H. ARSALAN**

*University of Karachi, Karachi

**NUST Islamabad

Abstract

Many people are not well aware of the harmful impacts of smoking specially those residing in the developing nations because of lower literacy ratio. Tobacco smoke pollution has great effects on the health of adults and children. Smoking results in many minor and major diseases like coughing, asthma, oral cancer, lung cancer and heart attack. In this study, attempt was made to portray the controversy of belief, deed and geographical distribution of respondents about cigarette smoking in Karachi- the populous mega city of South Asia. The investigation will be made with emphasis on the physical and social qualities of indigenous human life. The most important objective of the study was to discover the role of geographical factors in shaping up the perception of a person.

Introduction

The issue of beliefs and deeds has been ever unsettled in socio-economic environment. Perception studies often converge on this dilemma and ever coincide with the general behavior of society. Human consumption of tobacco is as old as history. In developing countries where the media has a free hand to propagate smoking through advertisements, study of public perception regarding it could be interesting.

Environmental tobacco smoke (ETS), also called "secondhand smoke," is the combination of two forms of smoke from burning tobacco products:

Side stream smoke, or smoke that is emitted between the puffs of a burning cigarette, pipe, or cigar, and Mainstream smoke, or the smoke that is exhaled by the smoker.

The primary motivation to smoking in any case is to obtain pharmacological effect of nicotine, which is an agent of pleasurable body response. All people smoke for this pleasurable feeling some call it a lift and some call it relaxation. Whatever the individual intent, the act of smoking remains a symbolic declaration of personal identity. Smoking is more prevalent among people under stress. This idea can pursue further by making these observations. Tobacco use has been the leading preventable cause of death and disease in the many developed and developing countries for decades (McGinnis and Foege, 1993; US Department of Health and Human Services, 2000). This risky behavior is often initiated during childhood and adolescence, as more than 70% of adult smokers report that they started smoking on a daily basis prior to age 18 (Lynch and Bonnie, 1994). According to the Centers for Disease Control and Prevention (CDC)-US, nearly 64% of high school-aged adolescents US-wide have ever smoked, and almost 29% are current smokers (Grunbaum ., 2002) and the similar situation is in Pakistan. These and other statistics have prompted Ministry of Health, Private and Public Health Services to adopt a youth-centered tobacco control policy advocating increased tobacco prevention and intervention programming at the national, state, and local levels (Lynch and Bonnie, 1994).

Although tobacco use is considered harmful to all children, adolescents, and adults, there are subgroups for which smoking is particularly risky. Included among these subgroups are persons diagnosed with chronic obstructive pulmonary diseases (COPDs), including asthma. According to a 1997 report issued by the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health, asthma is an inflammatory disorder of the airways resulting in frequent episodes of wheezing, breathlessness, chest tightening, and coughing. These symptoms most often begin in childhood, though they can develop throughout life. In addition to medication, self-management strategies can successfully control asthma, through such steps as identifying and avoiding environmental irritants that trigger or exacerbate asthma symptoms. As tobacco smoke tops the list of potential irritants, the NHLBI recommends that persons with asthma not smoke or be exposed to tobacco smoke in their environment.

Several studies have concluded that the prevalence of smoking among persons with respiratory diseases are the same as the prevalence of smoking among persons without any chronic respiratory disease (Backer , 2002; Brook and Shiloh, 1993; Forero , 1992; Martin , 1982), or in some instances higher (Forero , 1996; Kaplan and Mascie-Taylor, 1989, 1997; Sherman , 1990). Though many possible explanations for this disturbing association exist, the topic has received surprisingly little empirical attention. In one of the few studies to directly assess reasons why adolescents might be drawn to smoking, Zbikowski , (2002) examined smoking status and a host of psychosocial risk factors (approval of smoking, accessibility of cigarettes, value of smoking, rebelliousness, social support, sadness, stress) among 3,234 adolescents ranging in age from 15 to 18 years, approximately 16% (n = 505) of whom had a positive chronic respiratory diseases history. In their sample, the overall prevalence of current smoking was 20%. Adolescents with chronic respiratory diseases were significantly more likely to smoke (17% to 22%) than were those without respiratory disease (17%).

Factors associated with an increased likelihood of smoking did not differ between the two groups, leading to the conclusion that adolescents with or without understanding of lethal diseases may smoke for similar reasons. Among the factors affecting the decision to smoke that have consistently received support in the tobacco control literature are: (a) one's level of exposure to smokers in the social environment, (b) the degree of parental oversight or adolescent autonomy in the parent adolescent relationship, and (c) an adolescent's level of psychological distress. For example, exposure to smoking among family members and among friends has been shown to highly influence adolescent smoking practices, including initiation of smoking and progression to greater levels of smoking (Chassin , 1996; Choi , 1997; Distefan , 1998; Tercyak , 2002). Wang and colleagues (1999) reported that parental smoking was associated with a 30% increase in the likelihood of adolescents becoming current smokers, and the number of friends who smoked was associated with a 44% increase. Smoking among family members and friends may increase smoking acceptability and cigarette availability (Flay, 1993; Jackson , 1998), thereby laying a foundation for the adoption of regular smoking.

In terms of autonomy, data suggest that adolescents with less parental involvement in their day-to-day activities and thus more decision-making autonomy are more likely to experiment with tobacco and other drugs (Baum-rind, 1985; Chilcoat and Anthony, 1996; Cohen , 1994; Griffin , 2000). Radziszewska , (1996) found that adolescents with unengaged parents (i.e. adolescents high in decision-making autonomy) experienced the poorest adjustment as indexed by a number of factors including smoking. This relationship was particularly robust, as it held up across ethnic, gender, and socioeconomic status groups. Along with these social factors, psychological distress has been associated with adolescent smoking as well (Brown , 1996; Covey and Tam, 1990;

Patton , 1996). Depression, the most commonly studied form of such distress, has been shown to be a predictor of smoking initiation (Escobedo , 1996), may be associated with nicotine dependence in adolescents (Kassel, 2000), and can have a negative impact on stopping smoking (Glassman , 1990). In a study by Kandel and Davies (1986), it was found that lifetime and current smoking were significantly higher in young adults (ages 24 –25 years) who had had elevated depression symptoms as adolescents (ages 15 –16 years). This suggests that depression may make an individual vulnerable to initiating smoking and maintain his or her smoking behavior over time. Indeed, nicotine contained in cigarettes is a stimulant and may induce feelings of euphoria and relaxation, which could ameliorate depression symptoms (Anda , 1990).

Since some adolescents with asthma experience psychological distress related to their illness (Creer and Bender, 1995), this too might in turn affect their smoking risk. In addition to these questions, there are uncertainties about attempts to stop smoking made by adolescents who currently smoke. Not all adolescents who smoke wish to continue to do so, and many regret starting.

According to the 1989 Teenage Attitudes and Practices Survey United States, nearly three-quarters of youth who smoke had seriously considered stopping smoking and almost one-half made a recent attempt to stop (CDC, 1994). In 2001, 57% of adolescent current smokers US-wide had tried to stop smoking within the past year (Grunbaum , 2002). O'Byrne (2002) found autonomy in the parent-adolescent relationship to be positively associated with adolescents' attempts to stop smoking, suggesting that further research in this area is warranted. In light of these issues, the goals of the present study were to:

- Determine the prevalence of lifetime and current cigarette smoking and recent attempts to stop smoking among residents of Karachi,
- Explore potential psychosocial risk factors for smoking,
- Find out the control of mass media in initiation of tobacco smoking, and
- Spell out the geographical disparities caused by socio-economic characteristics of the societies in Karachi metropolis.

Consistent with the prior literature, it was hypothesized that exposure to environmental cigarette smoking (i.e. smoking among parents and friends), greater decision-making autonomy, and greater symptoms of depression would be positively associated with smoking and negatively associated with recent attempts to stop smoking, as they are key factors shown to be related to tobacco use in prior literature.

Material and Methods

Data were collected from a sample of residents of Karachi. Karachi metropolis comprises 18 administrative towns. Cluster sampling was used, where the sampling unit was the smoker of any age group. When cluster sampling is used, subject responses cannot be assumed to be independent as people within the same playground or library are more likely to be similar to each other than people in general. This can therefore produce higher standard errors but level of precision of estimates can be maintained when the sample size is increased according (Roberts ., 2002). This study took these issues into account when determining the minimum sample size, which this survey exceeds. A systematic random sample of 18 administrative towns of Karachi was selected. If any person was unwilling or unable to participate in the survey, another person from the same locality or town was randomly selected.

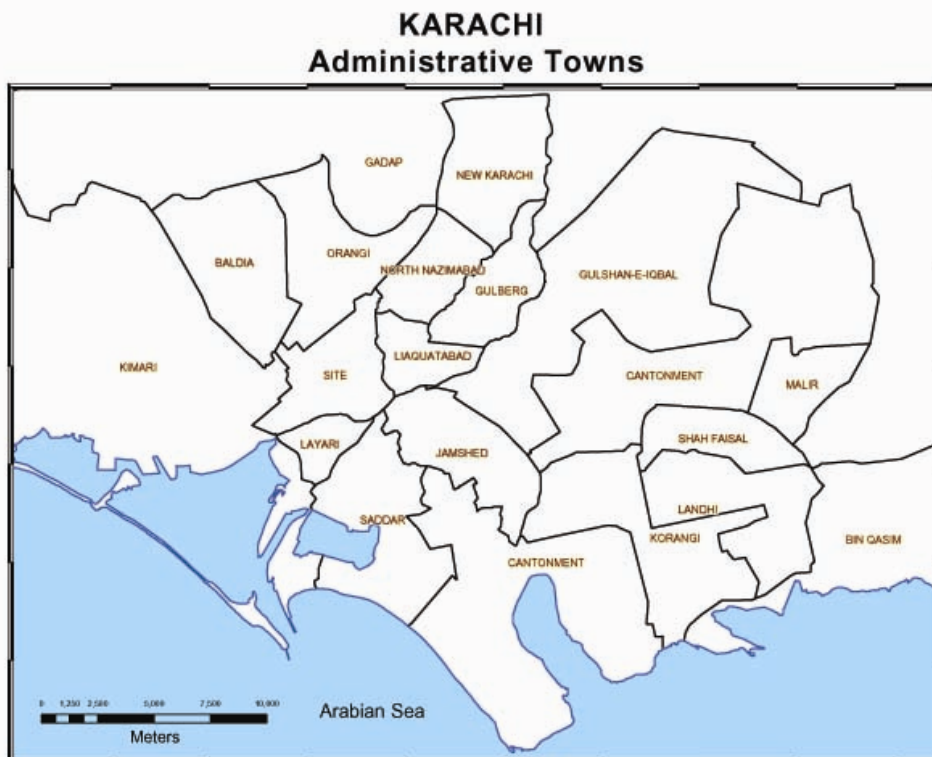


Figure 1

Questionnaire was developed that uncovered the facts related to the objectives. Questions were designed to explore personal and geographical information such as age, gender, education, locality; Socio-economic status; Reasons to start smoking; perception about the adverse effects of smoking; impact of media in form of advertisement campaigns. The questionnaires were executed in form of personal interview and intercept survey. Personal interview involves the questionnaire, which is filled by interviewing the respondent at his home or at anyplace. Intercept survey is the interview conducted when the respondent is engaged in his work without disturbing him.

Geographical Information System

The collected data were geographically managed town wise. Preliminary capabilities of Geographic Information Systems have been used to store, retrieve, manage, analyze, manipulate and visually present the data. Through the techniques of digital cartography an administrative map of Karachi was developed in close polygon format with basic infrastructure and landmarks. Separately, database has been developed for individual data entry. However, ultimately collective statistics in grouped form were integrated with cartographically carved administrative towns. Besides geographic analysis descriptive statistics were also calculated and presented in graphical forms.

Results and Discussion

Karachi Division comprises 18 entities known as towns. The names of the towns with their assigned town number are as under (Figure 1):

1. Kimari Town
2. SITE Town
3. Baldia Town
4. Orangi Town
5. Lyari Town
6. Landhi Town
7. Korangi Town
8. North Nazimabad Town
9. New Karachi Town
10. Gulberg Town
11. Liaquatabad Town
12. Malir Town
13. Bin Qasim Town
14. Gadap Town
15. Sadar Town
16. Jamshed Town
17. Gulshan-e-Iqbal Town
18. Shah Faisal Town

Age and Sex Composition: The age composition of respondents is classified into five classes. Most of the respondents are from 18 to 25 (33.8%), 26 to 40 (37%) and 41 to 60 (25%) category while a smaller group belong to Below 18 (2.4%) and Above 60 (2.2%) category. It is evident that a large number of respondents represent independent (Earning) population that is the most important tier of any country, because of its active participation in economic activities. Under 18 years and above 60 years are the two of dependant population categories that usually have no income source.

The Male population that comprises 97% of total respondents while female respondents are only 3.1% dominates the sex composition of respondents. Major reason for this distinction is the socio-cultural aspects and values of our society. The geographical distribution of respondents' sex is shown in (Figure 2).

Educational Status: Pakistan has a low literacy ratio. People in big cities are more educated while in the rural areas illiterate people are more in number. Outskirt areas of Karachi are rural areas having high values of illiterate and low level of education as compared to the intense urban populated areas. Karachi is the most developed city of Pakistan as compare to the rest of Pakistani cities and rural areas, and has the largest population in the country. However, this development is not on a par as development level in European or American cities. Educational status of Karachiites is better than the other parts of the country. 10% respondents are illiterate, 10.4% are under grade 10 (matric), 40% are under grade 14 (graduates), 6% are grade 14, 5.3% are post graduates (Masters or higher education) while 5.3% respondents have other qualification (Figure 3).

Larger proportion of respondents are under graduate that means that they have some better knowledge though they are not well educated but can decide better than illiterate and under matric people. The important point is that despite of knowledge and awareness they are smokers that means they are not well aware of the devastating impacts of smoking.

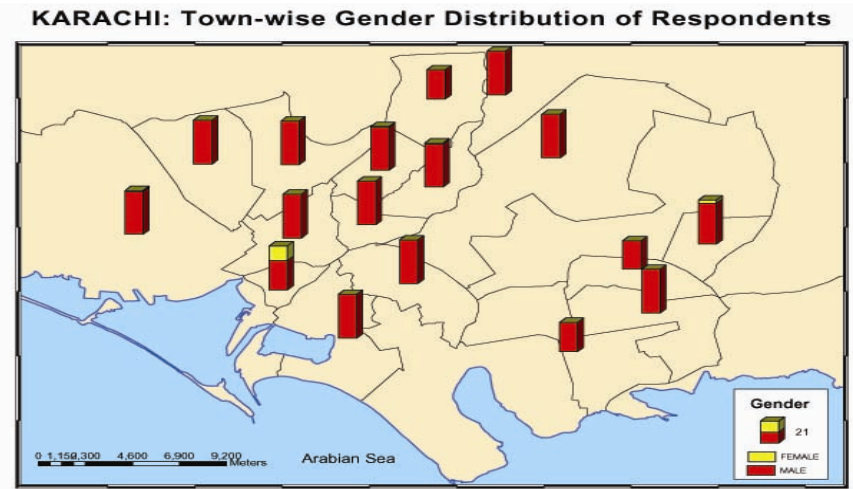


Figure 2

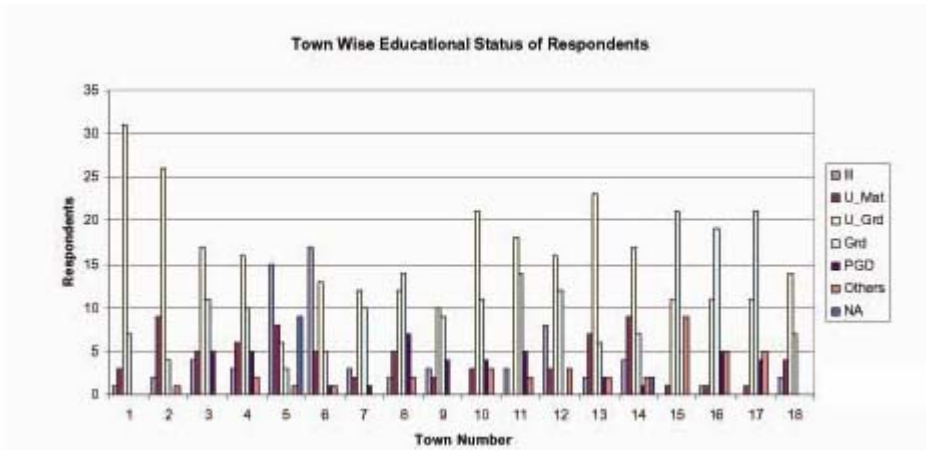


Figure 3

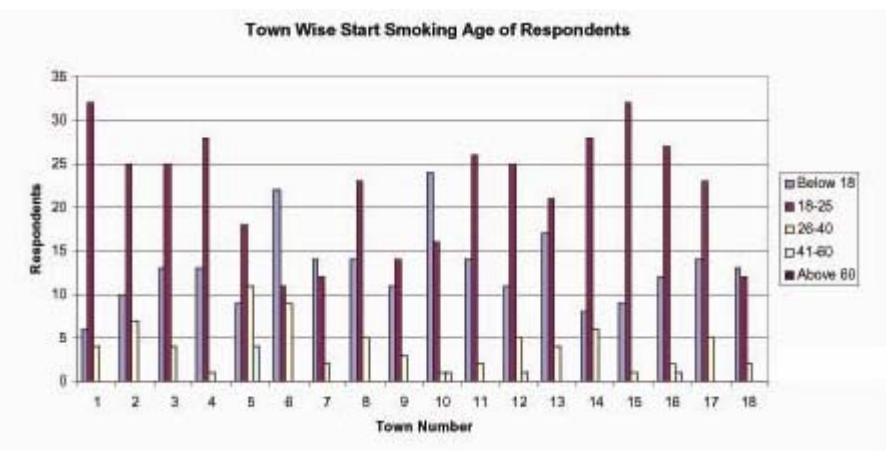


Figure 4

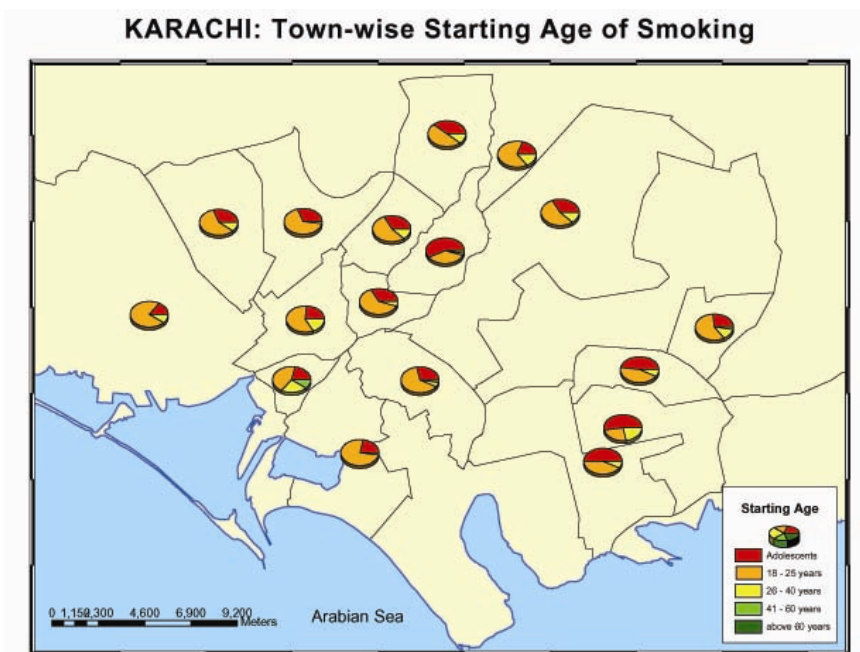


Figure 5

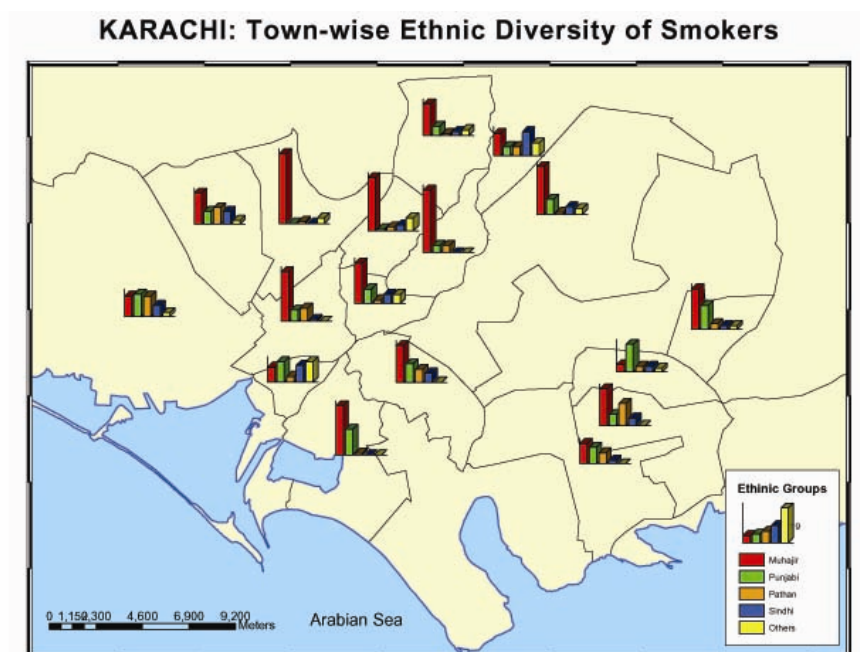


Figure 6

Starting Age: Most of the people start smoking in the very earlier part of their lives. Some smoke in later age after retirement but such people are very few in number.

Figure 6 shows the largest proportion of smokers started smoking in the age group of 18 to 25 years (56%), while none of the respondents started smoking in above 60 age group, 26-40 and 41-60 categories have 10% and 1% respondents respectively. Second highest proportion is of Below 18 (32.82%), which has not enough knowledge. Children of this age are most affected because they spent a larger part of their future lives in smoking and have weaker muscles and nerves so cut off their life expectancy rapidly.

In geographical context it is worthwhile to mention a unique pattern of starting age of smoking that in the areas where the education level is low, and socio-economically deprived, the starting age of smoking for the most of the respondents are in adolescence (Figure5).

Ethnic Background: Karachi is the richest city of Pakistan in terms of mixed cultures as it fulfills all basics of a cosmopolitan city. Most of the respondents are mahajir 49% while Punjabi are 22%, pathan are 12% and sindhi are 10%. These values confirm the mixed composition of the city and make this study applicable for all over Pakistan. Its town-wise geographical distribution is shown in Figure 6.

Income Level: In Karachi income levels are better than the other parts of the country and the average income is higher too. But it does not necessarily mean it is equivalent to the developed nation because Rs 5000 is about \$84. This money is for a family while the average household size in Karachi is about 6.5 that indicate monthly per capita income which is only \$13. Income group of below 5000 is 29.5%. Most of the respondents (50.35%) lie in 5000 to 15000 group.

These statistics depict that most of the respondents have enough income to spare for smoking expanses. An interesting issue is that the higher income groups are less in proportion one reason may be their unavailability for interview or another can be the higher awareness level. Low-income group has a significant proportion but not as large as middle-income group is. Most of low-income earners have less money to spend on cigarettes, while others depend on local drugs to fulfill their pleasure gaining demands.

Weekly Expenditures: This question was added in the survey to evolve that how much amount people waste in this harmful habit. Most of the respondents (74.37%) spend 0-200 rupees weekly, 17% spend 201-400 and 6% spend 401-600.

Amount spent on cigarettes is dependant upon the brand they use and the number of cigarettes they smoke. In either case the dilemma is that in a country where resources are not sufficient and several people are suffering from starvation and malnutrition even then is this justified to spend 200 rupees weekly on these things! Spent amount is related with the income level of the respondents too, as the middle income group dominated the survey sample that's why the first category (0-200) is the highest.

Number of Smoked Cigarettes: Respondents were asked about how much cigarettes they usually smoke in a day. To answer the question four options were given, where option 1 means 1 cigarette in 2-3 days, 12% respondents opt it means they smoke rarely or are causal smokers. Option 2 stands for 3-5 cigarettes a day, 34.2% respondents checked this option, which is an alarming rate. Option 3 is 10-20 cigarettes a day, the largest proportion of respondents (37%) lie under it, which show the addiction of such people to smoking. This group is playing havoc with their own and associated people lives. Last option (4) is more than 20 cigarettes a day, 16.8% respondents checked it which shows that they do not care about their health and are getting closer to death day by day. Such people are chain smokers who not only harm themselves but also are equally dangerous for their family members or co-workers by supplying second hand smoke.

Advertisement Attraction and Enjoyment: There are a large number of attractive advertisements presented on media to lure people. This study is designed in a manner to

examine the advertisements' impact over people. As the survey sample is composed of smokers that's why results are somewhat unclear. The largest proportion of respondents (54.08%) marked that they do not enjoy cigarette ads (Option N), 45.92% respondents replied that they enjoy cigarette ads (Option Y). This nearly equal response makes it clear that smokers do not care about the advertisements as they have adopted the habit and now are used to it, usually fresh smokers enjoy such advertisements (as they are attracted by the same).

Slide Reaction: The slide "Caution cigarette smoking is dangerous for health" is printed on backside of cigarette pack and is shown after the cigarette ads. Respondents have asked to express their reaction to this note. Option 1 is "Never noticed it", most of the respondents (28%) opt it, 18% respondents took Option 2 "Who cares for it?" 27% respondents (second highest) checked Option 3 "It is our hypocrisy" while 26% respondents favored Option 4 "This note is better for non-smokers".

Such mixed attitude of respondents shows that once people start smoking then they stop thinking about its devastating impacts, in order to justify their choice (Smoking habit). The smokers are so involved in smoking that they never try to have a look on the other side of the picture.

Reasons for Start Smoking: People smoke for different reasons; some start smoking because of socio-economic problems, some enthusiastically and some by inspiration. Respondents are investigated to evaluate the reasons for start smoking. Option 1 "By inspiration from someone" is selected by 13.7% respondents, Option 2 "By Attractive advertisements" is checked by 7.43% respondents, Option 3 "In tension or because of some trouble" is responded by 19.07%, very little proportion (7.71%) respondents choose Option 4 "reluctantly", the largest proportion of respondents (52.03%) selected Option 5 "enthusiastically".

Conclusion

Environmental pollution is already very high in Karachi, so the after effects of smoking enhance the critical situation. Number of asthma patients and ENT related disease patients are increasing in the city. On the other hand number of cancer patients are also rising in the city, however lung cancer take over the others. This alarming increase in respiratory diseases cases and increasing number of smokers are a great threat to overall health.

Middle-income group (50% people) dominates in Karachi who earns 5000 to 15000 average money. People waste their precious money in smoking related expanses and the remainder on improving their deteriorating health. These useless expanses are economic burden on the smoker himself and on the country's overall economy too. Most of the smokers use to smoke 10-20 cigarettes a day, which represent their addiction to smoking. Such statistics are intimidating and should be noticed and some solution must be device to control the situation.

The youngsters of the city are on cutting edge as 18-25 years is the average age group in which people start smoking. Most of the young people start smoking to impress others, some do it as adventure and some start it when they are in trouble but the alarming issue is that 52% people start smoking enthusiastically. It is needed to de-glamorize cigarettes and to project smoking as the worst thing. Majority of people have never noticed the caution on cigarette pack, which shows the in-effectiveness of this note. People are not well aware of diseases related to smoking. Most of the people cannot differentiate in life threatening and minor diseases, some people think that cough is a major disease while others responded that cancer and asthma are minor diseases.

People perceive differently about smoking and quit smoking and mostly they deny their own statements. Even half of smoker population says that it is harmful for their health but on the other hand they stated that it is difficult to quit smoking or why should they quit it. That means the awareness level needs to be improved to control this situation. People are not ready to quit smoking but are trying to quit it while saying that it is harmful but not destroying their health.

Government should take steps to launch campaigns for improving the awareness level and to control dilemma of their statements. Motivations to quit smoking should be projected and smoking related death statistics and diseases should provide full coverage by media. Educational institutes must arrange programs to save youngsters by involving in smoking. Parents must take care of their children and keep check on them so that they will not adopt smoking easily. Combined efforts on community and government level can improve the situation very much. Now government is trying to make law for cigarette selling and to restrict cigarette sellers to display caution in bold heading in front of their shops.

Acknowledgement

Authors are grateful to the Dean, Faculty of Science, University of Karachi for providing financial assistance.

References

- Brown, R. A., Lewinsohn, P. M., Seeley, J. R., and Wagner, E. F. (1996). Cigarette smoking, major depression, and other psychiatric disorders among adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1602 – 1610.
- Baumrind, D. (1985). Familial antecedents of adolescent drug use: A developmental perspective. *National Institute of Drug Abuse Research Monograph* No. 56, 13 – 44. US Government Printing Office, Washington, DC:
- Brown, R. A., Lewinsohn, P. M., Seeley, J. R., & Wagner, E. F. (1996). Cigarette smoking, major depression, and other psychiatric disorders among adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1602 – 1610.
- Chassin, L., Presson, C. C., Rose, J. S., & Sherman, S. J. (1996). The natural history of cigarette smoking from adolescence to adulthood: Demographic predictors of continuity and change, *Health Psychology*, 15, 478 – 484.
- Creer, T. L., & Bender, B. G. (1995). Pediatric asthma. In M. C. Roberts (Ed.), *Handbook of pediatric psychology*. Guilford Press, New York.
- Escobedo, L. G., Kirch, D. G., & Anda, R. F. (1996). *Depression and smoking initiation among US Latinos*, *Addiction*, 91, 113 – 119.
- Forero, R., Bauman, A., Young, L., & Larkin, P. (1992). Asthma prevalence and management in Australian adolescents: Results from three community surveys. *Journal of Adolescent Health*, 13, 707–712.
- Forero, R., Bauman, A., Young, L., Booth, M., & Nutbeam, D. (1996). Asthma, health behaviors, social adjustment, and psychosomatic symptoms in adolescence. *Journal of Asthma*, 33, 157–164.
- Glassman, A. H., Helzer, J. E., Covey, L. S., Cottler, L. B., Stetner, F., Tipp, J. E., (1990). Smoking, smoking cessation, and major depression. *Journal of the American Medical Association*, 264, 1546 – 1549.

- Grunbaum, J. A., Kann, L., Kinchen, S. A., Williams, B., Ross, J. G., Lowry, R., (2002). Youth risk behavior surveillance—United States, 2001. *Morbidity and Mortality Weekly Report, Surveillance Summaries*, 51, 1–62.
- Kandel, D. B., & Davies, M. (1986). Adult sequelae of adolescent depressive symptoms, *Archives of General Psychiatry*, 43, 255 –262.
- Kassel, J. D. (2000). Are adolescent smokers addicted to nicotine? The suitability of the nicotine dependence construct as applied to adolescents. In E. F. Wagner (Ed.), *Nicotine addiction among adolescents* (pp. 27– 49). NY: Haworth Press.
- Lynch, B. S., & Bonnie, R. J. (1994). *Growing up tobacco free: Preventing nicotine addiction in children and youths*, National Academy Press, Washington, DC.
- Martin, A. J., Landau, L. I., & Phelan, P. D. (1982). Asthma from childhood at age 21: The patient and his disease, *British Medical Journal*, 284, 380 – 382.
- McGinnis, J. M., & Foege, W. H. (1993). Actual causes of death in the United States, *Journal of the American Medical Association*, 270, 2207–2212.
- Microsoft Encarta Encyclopedia 2000
- O'Byrne, K. K., Haddock, C. K., & Poston, W. S. (2002). Parenting style and adolescent smoking. *Journal of Adolescent Health*, 30, 418 – 425.
- Roberts C., Francois, Y., Batista-Foguet, J., and King, A., 2000, In Currie, C., Hurremann, K., Settertobulte, W., Smith, R. and Todd, J. (eds) *Health and Health Behaviour Among Young People*. Health Behaviour in School-Aged Children: A WHO Cross-National Study (HBSC) International Report. WHO, Copenhagen
- Radziszewska, B., Richardson, J. L., Dent, C. W., & Flay, B. R. (1996). Parenting style and adolescent depressive symptoms, smoking, and academic achievement: Ethnic, gender, and SES differences. *Journal of Behavioral Medicine*, 19, 289 –305.
- Wang, M. Q., Fitzhugh, E. C., Green, B. L., Turner, L. W., Eddy, J. M., and Westerfield, R. C. (1999). Prospective social-psychological factors of adolescent smoking progression. *Journal of Adolescent Health*, 24, 2–9.
- Zbikowski, S. M., Klesges, R. C., Robinson, L. A., & Al-fano, C. M. (2002). Risk factors for smoking among adolescents with asthma. *Journal of Adolescent Health*, 30, 279 – 287.