

Assessment of the knowledge and attitudes of preliminary school students toward smoking in Baghdad

Abbas Jabbar Sahib ⁽¹⁾, Husham J Abd Al-Badri ⁽¹⁾

(1) Noncommunicable Diseases department, Public Health Directorate, Ministry of Health, Iraq

CORRESPONDING AUTHOR: Husham J Abd Al-Badri, Noncommunicable Diseases department, Public Health Directorate, Ministry of Health, Iraq.
Telephone: 009647813834152; Email: dr.husham82@gmail.com

NO FINANCIAL DECLARE
NO CONFLICT OF INTEREST

DOI: 10.2427/11612

Accepted on January 28, 2016

ABSTRACT

Background: Early smoking is considered as a major challenge for health promoters, as well as it is socially not acceptable, thus interventions must tackle childhood starts of smoking.

The aim of this paper is assessing the knowledge and attitude of preliminary students towards tobacco use.

Methods: A cross-sectional descriptive study conducted among 2915 (Fifth grade) students from 30 preliminary schools in Baghdad [15 from each side (Karkh & Rusafa)] during November 2014. Researchers used a multistage sampling technique to select the study sample.

Results: Joined students age ranged between 10-13 years and 51.9% of them were females. 54.3% of their parents were nonsmoker while the rest reported that both or one of them are smokers. Out of total participants 82.4% and 66.2% knew about direct and indirect risks of cigarette smoking respectively. Seventy per cent of students' families warn their kids from smoking hazards, while more than 50% of them have received health education messages from their teachers. Eighty-six per cent of the participants did not like sitting near smokers. Smoking is considered religiously inconvenient by 51.4% and 34.6% considered it a sign of no self-confidence. At last 73.7% of the surveyed students agreed with smoking prohibition in public places while 25.8% opposed that.

Conclusion: Despite the high percentage of students' parents were smokers, risks of smoking are well-known by the surveyed students who showed positive attitudes toward smoking prohibition in public places. Parental advising for quit smoking and urging teachers to educate their students about smoking hazards might be the right action.

INTRODUCTION

Health risks of tobacco are well-known, despite most of young people get these habits every year. In fact, 90% of all adult smokers started during early periods of their life, so it is important to make sure children understand the risk of tobacco use [1].

People who begin smoking at younger age are more likely to fall into nicotine addiction than those who start at a later age [2]. Early life smoking increases the risk of cardiovascular diseases, including heart attacks and lung cancer [2]. Smoking tobacco during childhood and adolescence produces significant health problems among young people, including an increase in the respiratory

illnesses; it also may affect physical fitness and lung growth [3]. Other short-term effects of smoking include coughing and throat irritation. Overtime, an increase in the heart rate, blood pressure, bronchitis and emphysema may develop [3]. World Health Organisation has estimated that around half of the world's children are exposed to tobacco smoke [1]. In fact, the chemical nicotine in tobacco can be as addictive as cocaine or heroin and it affects mood as well as the heart, lungs, stomach and neurons [4]. Giving information to kids about the risks of tobacco smoke can help to protect them from these unhealthy habits [5]. Several studies revealed that young smokers are more liable for drug abuse and alcoholism [2].

According to Youth Tobacco Survey conducted in Baghdad among students aged 13 to 15 years in 2008, 13.4% of them were currently using tobacco products [6] which is a high rate in this age group. It is important to focus on younger age groups to provide them with knowledge and positively change their attitudes toward rejecting of smoking habits.

The aim of this study is to assess knowledge, attitude and practise of preliminary students towards tobacco use and to settle a satisfactory plan to protect the younger age students from smoking threats.

METHODS

This is a cross-sectional descriptive study conducted among 2915 students randomly selected from 30 preliminary schools in Baghdad [1374 students from 15 schools in Al-Karkh & 1541 from a similar number of schools in Al-Rusafa]. Researchers used a multistage random sampling technique to select the study sample.

The thirty schools were selected randomly from 14 areas in both sides of Baghdad (7 on each side). Schools selection was conducted according to socio-economic status, population size and number of preliminary schools in each area. The study included two schools from each area plus three schools from those with higher schools number in each side of the city (like Al-Sadir area in Al-Rusafa and centre of Al-Karkh area). The fifth grade subclasses in the chosen schools were selected randomly in order to include all the students who were present at the study time and to assure a representative sample (Figure 1).

The researchers prepared the questionnaire in a simple way and delivered to all the selected students from the included schools during November 2014. The questionnaire included enquiries about current family smoking status and two questions for assessing knowledge about direct and indirect smoking hazards as well as source of information about smoking. It also included three questions assessing the attitudes of the students toward smokers and smoking banning.

Students' knowledge about tobacco smoking hazards was calculated by taking the average correct answers to

the two questions that were testing their knowledge about both direct and indirect (secondary) smoking risks.

Students' attitudes toward tobacco smoking were calculated by taking the average of positive answers of the three last questions, which were assessing their attitudes toward direct smokers and smoking banning actions.

The questionnaires were collected after filling and they were answered by students. The data was organised and analysed using Minitab 15 software with full descriptive analysis of students' responses about the asked questions which were represented as frequencies and percentages. The mean percentage scores of both students' knowledge and attitudes was calculated and discussed for comparative purposes with other studies.

RESULTS

Out of 2915 joining students with age ranged 10-13 years, 1139 (51.9%) of them were females.

1582 students (54.3%) said neither father nor mother have smoked, while 155 (5.3%) students said both parents have smoked.

The father was the only smoker for 1062 students (36.4%), while only 53 students (1.8%) said mother is the only smoker and 63 students (2.2%) said that they don't know (Figure 2).

2403 students (82.4%) confirmed risks of cigarette smoking on health, at the same time 188 (6.4%) were not sure about it. While 180 (6.2%) of them didn't think that it is risky to smoke, 133 (4.6%) believed that smoking is not a risk for health and 11 (0.4%) didn't answer this question (Table 1).

Students have shown a good knowledge about passive smoking. 1929 (66.2%) of them believed that sitting near a smoker hold a risk to his health and 620 (21.3%) of them were not sure about it. While 215 students (7.4%) didn't think it carries a health risk, further 149 students (5.1%) believed that sitting near a smoker never cause a harmful health effect on them (Table 1).

2063 students (70.8%) said a family member has talked about smoking health effects, while 831 (28.5%) said nobody has done that and 21 students (0.7%) didn't answer the question (Table 2).

2514 students (86.2%) did not like sitting near smokers and for 214 (7%) of them it made no difference. While 188 (6.4%) of them liked it, at the same time 9 (0.3%) of them had no answer (Table 2).

More than a half (51.4%) of the study sample considered smoking inconvenient with religion. 1008 students (34.6%) considered smoking a sign of no self-confidence, 243 (8.3%) of them thought smokers have strong personality and 165 (5.7%) thought smoking reflects successful in life. Two students did not answer the question (Table 2).

When we asked students about their opinion on

FIGURE 1. Flowchart showing the sampling steps in the current study.

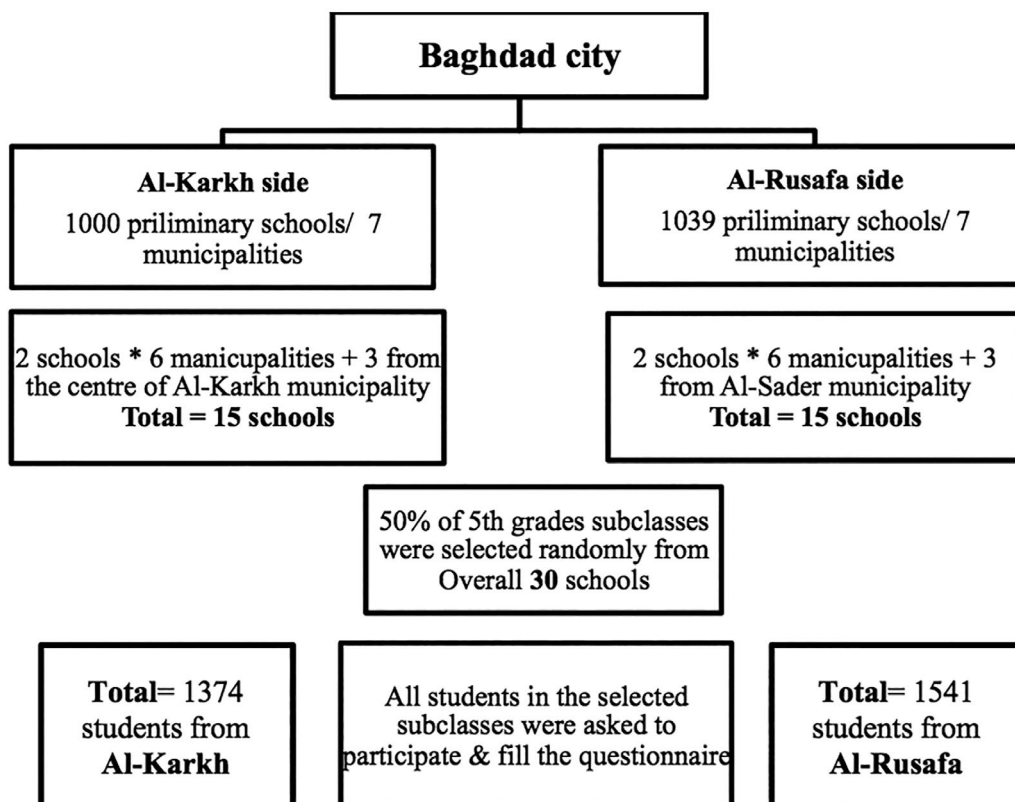


FIGURE 2. Bar chart showing smoking status within students' families, n=2915.

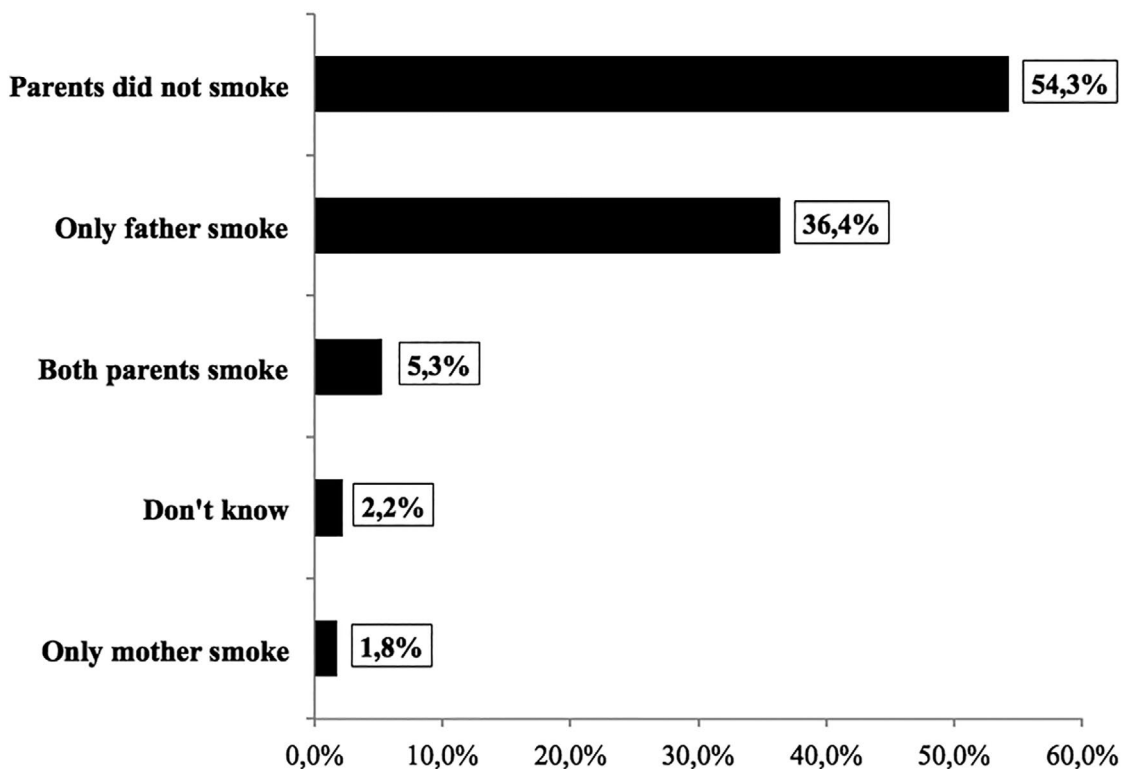


TABLE 1. Students' answers about their knowledge toward smoking risks, n=2915.

| QUESTION | NUMBER | % |
|---|--------|-------|
| Do you think the cigarette smoke affect health? | | |
| Yes | 2403 | 82.4% |
| May be | 188 | 6.4% |
| I don't think so | 180 | 6.2% |
| No | 133 | 4.6% |
| No answer | 11 | 0.4% |
| Do you think that the presence of smokers in the nearby is a risk for your health? | | |
| Yes | 1931 | 66.2% |
| May be | 620 | 21.3% |
| I don't think so | 215 | 7.4% |
| No | 149 | 5.1% |

smoking prohibition in public places, 2147 (73.7%) of students agreed and 75 (2.5.8%) disagreed, while 0.6% didn't answer (Table 2).

More than one-half (51.6%) of the students proved that they received health messages on school class from teachers about smoking harmful effects, while (32.1%) of them did not receive any health message. 16% of students said they are not sure if they discuss about the risk of smoke in school class.

Results showed that an average of 74.3% students had a good knowledge about smoking risks in general, while an average of 82% of them had positive opinions about smoking habits.

DISCUSSION

Beginning to smoke at an early age is more likely to lead to greater dependency and result in greater difficulty to quit as an adult [7]. Several studies were carried out to discover the knowledge and attitudes of preliminary schoolchildren toward smoking and its health risks.

The current study showed that more than 50% of Iraq families are nonsmokers, this agreed with other studies from Greece [8] and United Arab Emirates [9]. More than 60% of students' families in a study conducted in China were smokers and they even smoke in front of their children [10]. The percentage of smoking parents exceeded 70% in a study among 9408 Turkish students from 17 preliminary schools in Bursa, 2006 [11]. Varieties might be due to norms as well as health education of society.

More than two thirds of Iraqi families spoke to their children about the risk of smoking. This gives a good impression of the status of health education within the

TABLE 2. Main students' responses about their opinion about smoking, n=2915.

| QUESTION | NUMBER | % |
|---|--------|-------|
| Has any member of your family talked to you about the effect of smoking? | | |
| Yes | 2063 | 70.8% |
| No | 831 | 28.5% |
| No answer | 21 | 0.7% |
| Do you like sitting near smokers? | | |
| No | 2514 | 86.2% |
| No difference | 204 | 7.0% |
| Yes | 188 | 6.4% |
| No answer | 9 | 0.3% |
| What is your feeling if you see someone smoking? | | |
| Religiously inconvenient | 1497 | 51.4% |
| No self confidence | 1008 | 34.6% |
| Strong personality | 243 | 8.3% |
| Successful in his life | 165 | 5.7% |
| No answer | 2 | 0.1% |
| What is your opinion about smoking prohibition in public places? | | |
| Agree | 2147 | 73.7% |
| Disagree | 751 | 25.8% |
| No answer | 17 | 0.6% |

families and it was similar to a study that was conducted among 3954 preliminary school students from Iran in 2011 [12].

Three fourths of the students were aware about active and passive smoking hazards on health and this reflects the good health advises and information that were delivered to them either from teachers or from their families. Students' knowledge in this study was as good as that in studies from Thailand [7], Greece [8] and United Arab Emirates [9], as a matter of fact more than 70% of the participants were aware of smoking risks.

Most students in the present study do not like sitting near smokers. This fact agreed with a study conducted among 220 preliminary schoolchildren from Serbia in 2012, where 89.1% of them similarly preferred smoke-free areas [13]. The same response was found in studies from United Arab Emirates [9] and Iran [12]. On the other hand, in a study carried out in Greece 2005, only 36% out of 379 preliminary school students preferred smoke-free areas [14]. Negative attitudes might be caused by poor knowledge of the studied students about second-hand smoking hazards in comparison with the knowledge of the students in the current study.

The study also revealed that more than 50% of

students assess smokers religiously inconvenient and a high percentage of them did not look at smokers as self-confident, strong or successful people. Same attitudes were found among students of preliminary schools in a study from Iran [12]; similar community attitudes and religious beliefs could be a good explanation.

More than three-quarters of students agreed with suggestions of smoking banning in public places which reflects the general society's attitudes and their efforts to behave their children. This supports comparative studies from Greece [8], United Arab Emirates [9] and Iran [12].

CONCLUSION

Despite the high percentage of smoking among students' parents, surveyed students knew smoking risk.. Students were found to have positive attitudes toward smoking prohibition in public places.

It is important to advise students' parents to quit smoking clarifying its risks on their growing kids and urge. Urge teachers to educate their students about the health hazards of smoking and to keep them away from smoking areas. It is also necessary to encourage cooperation between the ministry of health and the ministry of education to set a plan aimed to control tobacco in preliminary schools delivering good attitude toward rejection of tobacco smoking.

References

1. World Health Organization. Tobacco Fact sheet N°339. Available from: <http://www.who.int/mediacentre/factsheets/fs339/en/> [Accessed November 19, 2015].
2. al'Absi M, Carr SB, Bongard S. Anger and psychobiological changes during smoking abstinence and in response to acute stress: prediction of smoking relapse. *Int J.* 2007; 66(2): 109-15.
3. National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. Preventing Tobacco Use Among Youth and Young Adults. A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention, 2012.
4. American Cancer Society. Cancer Facts & Figures 2014. Atlanta (GA): American Cancer, 2014.
5. Butt AL, Anderson HA, Gates DJ. Parental influence and effects of pro-smoking media messages on adolescents in Oklahoma. *J Okla State Med* 2009; 102: 147-51.
6. Centers for Disease Control and Prevention (CDC). Baghdad (Iraq). Global Youth Tobacco Survey 2008. Baghdad, Iraq; 2008.
7. Serasart S, Pharueng P, Jannual N, et al. Survey of Primary School Students regarding Knowledge and Attitudes towards Cigarette Consumption. *Khon Kaen Med J* 2013; 36(3): 14-22.
8. Piperakis SM, Karagouni-Areou F, Piperakis AS, et al. A Survey of Greek Elementary School Students' Smoking Habits and Attitudes. *International Electronic Journal of Health Education* 2007; 10(1):150-9.
9. Obaid HA, Hassan MA, Mahdy NH, et al. Tobacco use and associated factors among school students in Dubai, 2010: intervention study. *Eastern Mediterranean Health Journal* 2014; 20(11): 765-73.
10. Huang C, Koplan J, Yu S, et al. Smoking Experimentation among Elementary School Students in China: Influences from Peers, Families, and the School Environment. *PLOS ONE* 2013; 8(8): e73048. Available from: <http://dx.doi.org/10.4236/ce.2013.47061>.
11. Uncu Y, Irgil E, Karadag M. Smoking Patterns among Primary School Students in Turkey. *The Scientific World Journal.* 2006; 6:1667-73.
12. Nakhostin-Roohi B, Sojudi A, Hosseini MK. Magnitude of the smoking problem, knowledge, attitude and practice among family members of primary school students. *Epidemiology Biostatistics and Public Health* 2013; 10(2): e88361-6.
13. Tot Veres K, Zvezdin B, Vukosav D. Assessment of Knowledge, Behavior and Attitude of School Children towards. *J Pulm Respir Med* 2015; 5(6): 297.
14. Lazuras L, Rodafinos A. Survey of Smoking Attitudes in Grade School Children in Greece: A Preliminary Study. *Eur Addict Res* 2006; 12(1): 20-4.

