

Social Influence and Smoking Habit in Adolescent

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Abstract

Introduction: Adolescence presents a range of physical, mental, psychosexual and social changes. Teenagers influenced by endogenous or exogenous psychosocial factors, resort to using hard drugs or other addictive substances. The nicotine intake of cigarettes is the most common form of addictive substance among teenagers.

Material and Method: The sample of the study consisted of high school students aged 13-18 years old, from two cities of central Greece (Lamia-Larisa). Data were collected during the period 01/10/2011-25/02/2012. The questionnaire includes questions on the demographic data of participants and their smoking habits as well as 20 questions relating to social influence, as expressed through and shaped by the social environment and the media.

Results: From data analysis the frequency of smoking was 19.2%. The regular smoking of the sample was 10%. The friends of students who smoke are mostly girls (22%) with the percentage of boys standing at 2.6%. The Pearson correlation between the number of cigarettes and number of friends who smoke tested positive for both boys and girls.

Conclusion: In conclusion the social influence of tobacco, emerging as one of the most decisive factors promoting smoking activity. The study results indicate that a careful design and a comprehensive smoking policy (and not simply informing young people) about the dangers of smoking are needed.

Keywords: Smoke; Adolescent; Social influence; Prevention

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Introduction

Adolescence presents a range of physical, mental, psychosexual and social changes. The teenager at this developmental stage is invited to discover himself and also to determine the social integration and acceptance [1-3].

Teenagers try to be dear, accepted and often eccentric to the eyes of their friends and in their social environment [2,3]. The failure of adolescent to incorporate in any social group, creates a significant mental health disorders and social problems. Adolescence is implicated in the appearance of intense stress and various psychogenic factors leading to the emergence of psychiatric disorders, delinquent and antisocial behavior in teenagers [1-4].

Teenagers influenced by endogenous or exogenous psychosocial factors, resort to using hard drugs or other addictive substances.

The nicotine intake of cigarettes is the most common form of addictive substance among teenagers. According to a study by the Center for Disease Control and Prevention (CDC) in the U.S.A. the percentage of systematic smoking is estimated at 7.9% for junior high school students and 23.2% for high school students [5]. In Greece in a 2009 study by Sichletidis et al., showed that 29.6% of students were systematic smokers [6]. A similar study by Spyrtatos et al., [7] in 2012 reported that 14.2% of the sample was systematic smokers. The inclusion of young people in different groups, organizations or gangs lends confidence to the teenager which assists in the development of various social skills. The friendly environment of adolescents contributes decisively to the initiation of smoking and adopting smoking symperiforon [1,8]. The Forza et al., [9] found that adolescents smoked in order to observe the smoking rules of social groups or the rules of their best friend who smokes.

A particular characteristic shows the influence of ads on smoking behaviour of adolescents. The direct and indirect promotion of tobacco products seems to push young people to smoking. In U.S.A. it was calculated that 20% of outdoor billboards illustrates tobacco product [10]. According to Wakefield et al., [11] 3% of adolescents in U.S.A who are affected by ads, will be smokers in the future.

Purpose

The purpose of this research was to evaluate the susceptibility to smoking as "smokers" were those adolescents who had tried even a puff, which this is in line with other international references [1].

Material and Method

The sample of the study consisted of 873 students, aged 13-18 years old, from junior high school and high school students from two cities of central Greece (Lamia-Larisa). The school selection was based on stratified random sampling. Permission to carry out survey was obtained from the Ministry of Education (149051/Γ2/25-11-2011).

The choice of schools was random in a stratified way. Permission to carry out survey was obtained from the Ministry of Education (149051/Γ2/25-11-2011). Data were collected during the period 01/10/2011-25/02/2012. To ensure the validity of the questionnaire, there was a review of existing international questionnaires in the Greek literature as well as the international databases MEDLINE, EMBASE and CINAHL.

The questionnaire which used in this research includes questions regarding the participants' demographic data and smoking habits, as well as 20 questions regarding social influence. The answers to the social influence scale range from 1 (minimum) to 4 or 6 depending on the item (Likert-type scale). The answers to the attitude scale take 1 or 0 value. Cronbach's α for social influence and attitude were 0.77. The minimum value in the social influence smoking scale was 0 and the maximum was 11. The questions were encoded in a way that the higher values would represent a stronger social influence and higher susceptibility towards smoking. A descriptive and inferential statistical analysis was performed. After the univariate analysis, we applied a linear prediction model on the extent of social influence of smoking. The model integrated the variables which were correlated statistically significantly, in the univariate analysis, to social influence. The level of statistical significance was set at $P=0.05$. Of the 1000 questionnaires, 873 were returned completed (response rate 87.3%). The data analyzed by the statistic package of social science SPSS 17.

Results

From data analysis the frequency of smoking was 19.2%. The regular smoking of the sample was 10%. Teenager smokers prefer to smoke with their friends (7.4%), a 4.1% said they smoke anywhere they want and 1.6% smoke secretly (Table 1).

The friends of students who smoke are mostly girls (22%) with the percentage of boys standing at 2.6%. The friends groups

consist of students of 3 people who smoke (18%) while more than 3 friends were at 5.2% of the sample (Table 2).

The influence of advertising and social influences occur lower in smokers than in non-smokers, with note that smokers and non-smokers give average responses in the lower range of the scale (Table 3).

The X^2 test displays statistically significant difference in smokers to smoke a cigarette if you accept an offer from a friend while they believe that smoking makes young people of age more attractive (Table 4) [12].

The Pearson correlation between the number of cigarettes and number of friends who smoke tested positive for both boys and girls (Table 5).

Discussion

The findings of this study shows a high prevalence of smoking in adolescence and agree with the findings of previous studies in Greece and abroad. The rates of systemic teen smokers from the present study and globally are particularly increased giving dimensions of a major public health problem.

Comparing the percentage of systematic teen smokers in this study (10%) with the results of the C.D.C. we observed that this study shows almost the same percentage systematic smoking in senior - high school students (7.9%) and lower in high-school students (23.2%).

In Greece similar studies by Spyrtatos et al. [7] and Kyrlesi et al. [13] shows similar rates of systemic teen smokers (14.2% and 16.2%), while very high proportion (29.6%) is shown in study of Sichletidis et al. [6].

Table 1 Teenagers used to smoke.

| | N | % |
|----------------------------------|------------|--------------|
| Alone | 15 | 1,8 |
| With company | 65 | 7,4 |
| Secretly, do not see anybody | 14 | 1,6 |
| Anywhere I wanted, so I like it! | 36 | 4,1 |
| I do not smoke | 743 | 85,1 |
| Total | 873 | 100,0 |

Table 2 Smoking and friends.

| | N | % |
|----------------------------|------------|--------------|
| Nobody smoking | 452 | 51,8 |
| Smokes only the boys | 23 | 2,6 |
| Smokes only the girls | 192 | 22,0 |
| Smoking less of 3 friends | 161 | 18,4 |
| Smoking above of 3 friends | 45 | 5,2 |
| Total | 873 | 100,0 |

Table 3 Advertising and smoking.

| | Smokers | N | MT | SD | p |
|------------------|---------|-----|---------|---------|--------|
| Advertising/ | YES | 233 | 20,5737 | 2,98460 | <0,001 |
| Social influence | NO | 640 | 22,3217 | 3,02482 | |

As illustrated by this study and the bibliography, the prevalence of systemic teen smokers is particularly high and may be due to lack of antismoking policy and the ineffectiveness of prevention programs.

The social influence emerges both in this study and in international studies as the key factor of smoking habit among adolescents. The contribution of social influence may be indirect, which means that the teenager waits for others to define their behavior, or direct, through observation of the behavior of others and the impact that has on their health and their social visibility [14-16]. Friends have a significant influence on teenagers' life.

The main feature of adolescent period is the integration of young people in different groups, organizations or gangs. The collective mode of expression lends confidence to the teenager who assists in the development of various social skills. Many times the young moving within the collective sovereignty shall delinquency ethical and legal rules, vandalism and the use of addictive substances [14,15].

This study is consistent with the results of Forza et al. [9] and Moeini et al. [17]. Both studies show a statistically significant difference between smoking and friends' smoking. The social influence of smoking habit is a complex phenomenon with biological and social components and requires further investigation.

The effect of tobacco advertising in smoking behavior of adolescents is particularly high. Children smoke the most

advertising brands, which emphasizes that ads can affect teenagers to smoke as adults. Teenagers smoke the most frequently advertised brands of cigarettes, a phenomenon that shows that advertising messages, supposedly aimed at adults, can affect in the same way the adolescents [18-20].

More susceptible to start smoking are teens that often see pictures of people smoking or watch tobacco advertisements. Scientists agree that advertising has a subconscious influence and pushes children to start smoking. The advertising influences children to start smoking through messages that present smoking as a means of liberation and independence [21,22].

The results of this study show a positive influence of advertising on smoking habits of adolescents and coincide with the corresponding results of the study of Wakefield et al. [11] demonstrating the importance of advertising in the beginning of smoking activity, but also in shaping smoking behavior of adolescents.

In conclusion the social influence of tobacco, emerges as one of the most decisive factors for promoting smoking activity. The study results indicate that a careful design and a comprehensive smoking policy (and not simply informing young people about the dangers of smoking) are needed. Our findings constitute the need for aggressive intervention during adolescence, where the first concern should be to reduce the supply of smoking products and the minimization of tobacco advertising.

Table 4 Answers of smokers and non-smokers in social influence scale.

| Non Smokers | If one your friend gave you a cigarette, would you smoke it? | | | | | X ² | p |
|----------------|--|--------------|---------------|--------------------|-----------------------|----------------|-------|
| | Sure yes | Probably yes | Probably no | Sure no | I don't have opinion | | |
| Boys | 272 | 30 | 1 | 14 | 0 | 4,745 | 0,315 |
| Girls | 265 | 44 | 3 | 11 | 0 | | |
| Smokers | | | | | | | |
| Boys | 56 | 23 | 32 | 16 | 0 | 7,256 | 0,123 |
| Girls | 39 | 22 | 24 | 21 | 0 | | |
| Non smokers | Smoking makes people your age "attractive"? | | | | | X ² | p |
| | I totally agree | Probably yes | I don't think | I totally disagree | I haven't got opinion | | |
| Boys | | | | | | | |
| Girls | 170 | 95 | 23 | 29 | 0 | 8,349 | 0,080 |
| Smokers | | | | | | | |
| Boys | 44 | 51 | 13 | 19 | 0 | 7,100 | 0,131 |
| Girls | 43 | 41 | 14 | 8 | 0 | | |

Table 5 Pearson correlation between the number of cigarettes and number of friends who smoke.

| Gender | | Number of cigarette | |
|--------|--------------------|---------------------|-------|
| Male | Friends who smokes | Pearson Correlation | 0,327 |
| | | Sig. (2-tailed) | 0,011 |
| | | N | 59 |
| Female | Friends who smokes | Pearson Correlation | 0,420 |
| | | Sig. (2-tailed) | 0,002 |
| | | N | 54 |

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