



A Comparison of Knowledge and attitude about effects of cigarette smoking in high school boys in four districts of Ahvaz

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ABSTRACT

Introduction: Smoking is one of the major and preventable factors in out breaking of cardiovascular disease and is considered as one of the main causes of mortality in world. As well as, consumption of these materials is important risk factor and multiplier for many diseases such as respiratory diseases, cancer and stroke. Because the smoking will be one of the main issues of sanitary in communities in progress, so this study is done with the aim of comparison of knowledge and attitude about effects of cigarette smoking in high school boys in the four districts of Ahvaz. Methods: This study was descriptive analytical and sectional, with sampling stratified cluster. Collection of data was done by a questionnaire without family name and was formed from 3 parts of personal demographic, 12 questions for awareness and 15 questions for attitude about smoking. Results: Minimum of student's age was 14 and maximum of age was 19 years old. The average of age was $16/4 \pm 1/3$. The prevalence of smoking was 22/27%. About of awareness from cigarette effects, 40% of students had the level of high, 42/3 % had the level of average and 17/6% had a level of low and about the attitude, the level of 55% was high, 32/8% was average and 12/2 % was low. The statistical Chi-square test showed significant difference between different districts in attitude and knowledge of students with $p = 0/00$. Discussion: There was significant difference between different districts in attitude and knowledge of students that indicates teens are from high risk groups that are subject to smoking and so informational and precautionary programs about smoking must be provided generally and by media and specifically in high schools for this group of society.

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INTRODUCTION

Smoking is one of the major and preventable factors in out breaking of cardiovascular disease [1]. And is considered as one of the main causes of mortality in world [2]. As well as, consumption of these materials is important risk factor and multiplier for many diseases such as respiratory diseases, cancer and stroke [3]. According to the world health organization reports, between 80000 – 100000 adolescents attempt to onset smoking daily that most of them are from developing countries [4]. And in these countries from 3 adults, one person acts to smoking [5]. Smoking is responsible for death in more than 5000000 person in the world annual that most of these cases are in the low and medium-income countries and it is expected that if this trend, the number of deaths due to smoking increase to 8000000 person till 2030[6].

The results of various researches about deaths caused by tobacco in the world had showed that this amount appropriate more than 75% of these cases to itself [7]. Several studies about prevalence of smoking done in developed countries, both in developing countries and results is expressed this fact that prevalence of smoking in youth is increasing and age of onset is decreasing [8]. Long-term addiction to tobacco, is the main behavioral reason for early deaths and disability that causes death for 4000000 in the world annually. According to the CDC census in United States of American, about 80% of smokers have started smoking before age 18 and about 3000 person of these people become to those that not been able to quit smoking and do it daily and regularly[9].

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There are many studies that all these reality show that start to smoking in the majority of addicted to cigarette is below 18 years old in the period of adolescence, and whatever the age that smoking is started is less, probability addicted to it in adulthood is increasing. Researches in the Rasht city showed that the prevalence of smoking experiences and the usage of cigarette was 15% and 54.6% [10]. In another study in Tehran city the prevalence of occasionally smoking in high school students, was 28.2 % [11]. Also according to a report from American the prevalence of smoking in high school students was 21.9% in 2003 [12].

Also the prevalence of smoking in Panjabi of India, between students was reported 2.3 % [13]. Reasons of cigarette smoking tendency are multiple that the most important of those is lack of awareness of the damages caused by tobacco smoking, nonchalance of physician and health officials from the informing the population, benchmarking from friends and parental smoking, widespread propaganda for smoking by media for profits, the aimless hedonism emotions of maturity requires attention, rebel of trauma, reduction negative emotions such as depression and disturbance, confusion and unknown motivations [14].

Because the smoking will be one of the main issues of sanitary in communities in progress, so implementation for control of smoking has importance [15]. Specially smoking in youngsters and adolescent causing main worry in public health and is one of the main problems of tobacco prevention [16]. Because in adults ages, this habit has tendency to become repeated and reinforcement [17].

Since onset of smoking at an early ages increases risks arising from its and to note that students have difficult path in pursuit of goals spend and also financial and intellectual capital for training and education cost, so the study of knowledge and attitude from effecting of cigarette smoking can plans health in order to reduction or cut is effective. In this regard, a study is done with the aim of comparison of knowledge and attitude about effects of cigarette smoking in high school boys in the four districts of Ahvaz.

Methods:

This study was descriptive analytical and sectional, with sampling stratified cluster. The sampling was determined after consultation with professor of statistics between 5% to 10% of population, that in this study for better results, was determined 10%. Accordingly to considering the number of students in every region, after going to offices of education and training 4 regions, the number of students was determined as follows:

In district 1: 800 students, district 2: 570 students, district 3: 760 students and district 4: 658 students and totally there were 2788 students.

Collection of data was done by a questionnaire without family name and was formed from 3 parts of personal demographic, 12 questions for awareness and 15 questions for attitude about smoking. Measures of awareness and attitude were classified in 3 level consist of low [obtain the score below 50%], average [obtain the score 50 -75%] and high [obtain the score more than 75%].

The questionnaire was self-made and its reliability and validity was confirmed in the study of "Prevalence of cigarette smoking and attitude and awareness of boy students from effects of cigarette smoking in high school in Birjand that was done by Namakin and associates [18]. After permission of departments of education and training in every district and with presentation the letter of introduction on behalf of Ahvaz Jundishapour University of Medical Sciences, researcher went to high schools and after explanations of aim of study and emphasis about confidentiality of personal information and no needing for write downing of first name and last name, were distributed between students and were collection after completion.

Results:

There were 2008 completed questionnaire from 2788 distributed questionnaire that had ability to analyzing, and following results were obtained: there was 587 students in district 1 [23/29%], 386 students in district 2 [19/22%], 589 students in district 3 [29/33%] and 446 students in district 4 [22/21%]. Minimum of student's age was 14 and maximum of age was 19 years old. The average of age was $16/4 \pm 1/3$. Majority of students [1561 person], Equal to 77/73%, expressed that they have not experienced smoking yet, and so prevalence of smoking was 22/27%. Majority of students, equal to 88/74% [1782 person], also expressed that they use cigarette sometimes and smoke for entertainment.

Majority of students, 66/18% [1329 person], expressed that there wasn't any smoking person in their houses. The statistical Chi-square test showed significant relevance between presence of smoking person in house and awareness of cigarette effects [$p = 0/006$].

Also there was significant relevance between presence of smoking person in house and attitude about cigarette effects [$p = 0/001$].

About the Reasons of smoking, majority of them, 36/46% [163 people], expressed ferret, and then other reasons were respectively included calm nerves [34/89%], entertainment [26/17%], and enjoying [4/69%].

Also, majority of them [41/16%] Stated that the reason of First time smoking was ferret and then the second reason was Insistence of friends [32/88%].

About of awareness from cigarette effects, 40% of them had the level of high, 42/3 % had the level of average and 17/6% had a level of low and about the attitude, the level of 55% was high, 32/8% was average and 12/2 % was low. The students of district 2 had the most awareness in high level with the amount of 21% and the students of district 3 had the most attitudes in high level with the amount of 14%. The statistical Chi-square test showed significant difference between different districts in attitude and knowledge of students with $p = 0/00$.

There was also direct connection between awareness of cigarette effects with father education so that increasing in education had increasing in awareness, therefore it reached from 39% in under diploma to 56/4 % in academic education.

There was significant difference between experience of smoking and attitude about cigarette with $p = 0/005$, and the students who had not experienced the cigarette had better attitude about that.

Table 1: The amount of knowledge about effects of smoking in various districts in students.

District Score	1	2	3	4	Total
Low	227 40.4%	117 30.3%	253 43%	197 44.2%	804 40%
Average	235 40%	188 48.7%	229 38.9%	198 44.4%	850 42.3%
High	115 19.6%	81 21%	107 18.2%	51 11.4%	354 17.6%
Total	587 100%	386 100%	589 100%	446 100%	2008 100%

Table 2: The amount of attitude about effects of smoking in various districts in students.

District Score	1	2	3	4	Total
Low	296 50.4%	207 53.6%	317 53.8%	284 63.7%	1104 55%
Average	212 36.1%	128 33.2%	189 32.1%	130 29.1%	659 32.8%
High	79 13.5%	51 13.2%	83 14.1%	32 7.2%	245 12.2%
Total	587 100%	386 100%	589 100%	446 100%	2008 100%

Discussion:

This study was done to determination of knowledge and attitude about smoking effects between boy students of Ahvaz city. In this study prevalence of cigarette usage was 22/27% that is somewhat high. Of course this amount is different in various studies. In the study that was done by Jamaljan and *et al* about opinions of students about cigarette smoking in Kerman results showed that 40/54% of boy students had experience of smoking at least once [19]. In another study on the senior students in Tehran prevalence of cigarette smoking was 7/2% [20]. In one national study by Sedigh on high school students, it showed that 23/3% of students were at risk of cigarette smoking [21]. According to high prevalence of cigarette usage and mean ages of students in this study, this problem must be considered as serious hazard. Whereas onset of smoking in lower ages can convert the person to heavy smoker and increases the dependence on nicotine and reduction the chance of quit, so prevention of onset smoking in adolescence is one of the main pillars of programs that its aim is diminution of smoking propagation and as a result, decrease morbidity and mortality.

In a survey, the average age of the first cigarette smoking between American students almost was 12 years old [22]. Generally the first experience of smoking occurs between 11-15 years old [23] and during 2 or 3 years convert to regular usage [24] and accordingly, experts focus on precautionary programs in lower ages between children and teens [25]. In this study majority of students expressed that there was not smoking person in their houses and there was significant relevance between presence of smoking person in house and attitude and knowledge about cigarette effects so that attitude and knowledge of students that have not smoking person in house was more. In the study of Majidpor and *et al*, also there was stronger relation between being a smoker person in family and smoking by children [26]. This results represents that in families that there is not tendency to smoking, there is more attitude and knowledge about disadvantages of smoking between the family and this opinion and science is transferred to children.

In this study majority of students expressed that ferret was the reason of smoking and also the reason of first time smoking and after that insistence of their friends. Also In the study done by Ghodsi and *et al*, majority of smoking students equal to 35/8% , expressed that the reason of smoking was ferret[27]. Siam in his study stated that the most important reason of tendency to smoking was accompaniment with crowd [28]. The most of accomplished studies corroborate significant influence of hail- fellow and crony on smoking in youth and that it is more important than usage of cigarette by parents, brothers and sisters [27]. Also in the study of Ansari ,

pleasure feeling from smoking and reduction of anxiety in most of cigarette smoking were the most reasons of cigarette consumption[29].

Amiri in his study expressed that usage of cigarette in persons who had smoking friends, was about 15 times more than other persons and there was relationship between cigarette usage and having smoking friends and cigarette usage in other persons of family [30]. As well as, the study of Siam showed that , motivations of tendency to cigarette in the students of study in majority of them was because of imitation from friends[28] .

Whereas, one of the reasons in tendency to cigarette is becoming a friend with smoking persons ,so emphasis of family and officials of department of education and training in order to selection non -smoking friends and informing the students from criterions and specifications of a good friend is very effective.

There was significant difference between different districts in attitude and knowledge of students that indicates teens are from high risk groups **that** are subject to smoking and so informational and precautionary programs about smoking must be provided generally and by media and specifically in high schools for this group of society.

Also in the study of Namakin and etals the level of knowledge in 25/5 % of subjects was low, 54/7% was average and 19/8% was high. As well as, the level of attitude in 5/1 % of subjects was low, 48/3 % was average and 46/6 % was high [18]. Also the results of several studies in advanced countries clear that this level of knowledge in youth is in an acceptable level. In the studies that had been done in Canada and France, general knowledge of youth about relationship between cigarette and cardiovascular disease was 63% and 41%. [31].

According to these results , It seems that increasing the knowledge of students can be effective in reduction of tendency to smoking .The amount of knowledge in students have direct connection with father education and there was increasing in awareness by increasing in father education . In the study that has done in Turkey by Tekbas and etals in 2002, there was significant connection between father education and smoking.

Whereas prevention of smoking is an important part of strategies in health primary care in our country , and since youth are the most vulnerable gang in the society, so attempts must be done in order to warning and informing about disadvantages of smoking and implications of that so prevention of gravitation.

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