J. Appl. Environ. Biol. Sci., 4(3)362-366, 2014

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ISSN: 2090-4274
Journal of Applied Environmental and Biological Sciences
www.textroad.com

The Pattern of Smoking Determinants among Kermanshah City Students on the Basis of BASNEF Model

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Received: October 12 2013
Accepted: January 8 2014

ABSTRACT

This study is an attempt to find the pattern of smoking determinants among Kermanshah city boy's students through BASNEF model. The average grade of knowledge and attitude in smoking were, in turn, 89.3±7.1 and 72.7±6.2. The average of daily cigarette numbers was 10.7. Statistical tests did not show any significant relationship between cigarette numbers and university or education level. The most important factor in smoking was the availability of cigarettes and the most important abstract norm in smoking was smoking friends. The most common reasons for smoking among young adults were aggression removal (38.3%), lack of healthy recreation and curiosity in the first smoking experience.

KEYWORDS: Smoking; BASNEF Model; Boy Student; Kermanshah City

INTRODUCTION

Smoking is the most Significant risk factor which increases different diseases, particularly, chronic and non-contagious diseases such as cardiovascular, respiratory diseases, cancer and cerebral infarction (1) so that it is the first cause of preventive death in the world. Smoking creates about 90% of lung cancer, 40% of other cancers, 50% of cardiovascular diseases, 75% of respiratory diseases, 12% of the total death and 30% of death between 30 to 50 ages (2). WHO estimates that more than one billion people smoke and 6000 billions cigarettes are smoked around the world (3).

Every three seconds, an individual dies due to smoking related causes. Among 3 millions people who pass away around the world annually because of smoking, one million live in developing countries. However, the numbers of smokers have been increased in those countries (4).

In fact, smoking is one of dangerous human behaviors which cause extra social and economical expenses in societies. As noted before, 1300000 people are smokers in the world. 4/5 of them live in the countries with low or average income (5). On the other hand, as compared to narcotic drugs, cigarette is the cheapest substance which is available in the society and also it is not as notorious as other materials in the community (6). In Iran, 27.2% of men and 3.4% of women are smokers (7) who use averagely 13.2 cigarettes every day which causes more than 50000 deaths annually (8).

In accordance with World Bank report, smoking expense was 200 billion dollars in 2000 in which one third was related to developing countries. The Studies show that 10% of family income is spent for smoking in poor countries and low social class groups (9).

If the price of every cigarette is estimated about 10 Tomans in Iran, the annual expense of smoking will be 429195000000 Tomans. However different researches revealed that smoking prevalence among the young has been increased and the age of their smoking has been decreased in both developing and developed countries (10, 11).

At the same time ,WHO has categorized cigarette as an addicting material and smokers as mental patients and points that cigarette addiction is widespread among most ages, social and economic groups, but adolescents and young adults are the most susceptible ones (12).

Every year, more than 800000 young adults and adolescents are added to permanent smokers. Increasing the onset of smoking and diminishing cigarette use among adolescents are one of the goals of WHO up to 2010 (13).

Being heavy smokers in youth period go up the possibility of early death caused by cigarette – related diseases up to 50% (14). According to Iranian Health Ministry report, only 10.7% of 15-24 year old individuals were smokers in 1991 but it was 17.1% in recent years (15). Some studies state smoking prevalence among 15-19 year old young boys and girls 10.5% and 0.7%, in order (16). As mentioned before, it seems that smoking

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has been developed among different social groups such as university students as a cultural and social pathology, it threatens the youth health. On the other hand, recognizing effective factors which encourage young adults to smoke and its dangers can help to make health programs to reduce smoking rate (17). Different studies mentioned the following reasons as the youth tendency to smoking: lack of knowledge of smoking danger, smoking friends and parents modeling, nonsense joy, puberty feeling, attention need, aggression, psychological problems, cigarette low price, easy availability and so on (18). According to Social Cognitive Theory, smoking in the youth is caused through observing social key characters (family, friends, instructors at schools and universities and health professionals) (19).

Since Iranian population is mostly young, the implementation of smoking control programs, especially preventing from early onset is so crucial. It would be better to recognize the related factors to cigarette use so that the preventive strategies could be planned in accordance with risk factors and problem area (20).

BASNEF Model is applied to study and plan to change behaviors and find the factors which influence on individuals' decision-making to take that effective behavior (21).

METHODS

This is a cross-sectional, analytical and descriptive study which was conducted to find behavior enabling factors and abstract norms influencing on smoking behavior-taking (in accordance with BASNEF Model) among university boy students in Kermanshah city in 2008. This research was done on all Kermanshah universities (Razi University (7 colleges), the University of Medical Science (4 colleges), Islamic Azad University, Payamnoor University) and 568 smoking boy students participated in.

Sampling method was snowball one. Data collection method was a researcher's – made questionnaire consisted of 70 questions in five sections; demographic questions (15 questions), knowledge questions about cigarette disadvantages (15 questions) which was multiple questions ,attitude questions about smoking (10 questions)tested with 4- scale choices, enabling questions (skills and essential sources in smoking) (15 questions) and abstract norms questions (the factors and individuals that lead the person to smoking) (15 questions). The questions were designed based on BASNEF Model. The grades of knowledge and attitude were measured from 100. Content validity method was used to recognize the validity of data collection method.

To do so, the questionnaire was given to ten members of scholars specialized in health education, psychiatry and psychology to assess the relevance of study goals and data collection method. To determine the reliability of internal consistency, the questionnaire was distributed to 20 smokers who were university students and did not take part in this study. Then, 89% of reliability achieved by Cronbach's Alpha Coefficient. Enabling and abstract norms questions were measured through frequency distribution. After collecting the data, SPSS, version 16, and Chi-square, One Way Analysis and Pearson correlation coefficient were used.

RESULTS AND DISCUSSION

As shown in table 1, 30.28% of cases, were daily smokers and 69.72% of them did so some of the time.

The results showed that there was no significant relationship between smoking and knowledge and attitude rates ($p=0.81$ and $p=0.63$). The average of daily smoked cigarette numbers was 10.7.

There was also no significant relationship between smoked cigarette numbers and university or level of education. The most frequency of abstract norm was due to smoking friends (table 2).

Also the most frequency of enabling factors is related to easy availability among students (table 3).

In the study of a behavior, it must note to the cause and effect. Individuals' functioning has different components which must be analyzed. Today, one-cause theory of behavior is rejected. Behavioral models clarify effective factors in behavior and some knows the powerful need in a moment as a behavior created factor (22).

Selecting the most effective model depends on using efficient theories and strategies in accordance with goals, population groups and the problem characteristics. Policies, rules, norms, social beliefs, socio–individual limitations and expected goals for different people are important in choosing and applying models and theories (23).

The use of this model showed that the most considerable factor which affects students' intention, was their smoking friends (82.56%) and it is congruent with past researches. Mohammadpourasl proved that close friends have not only significant role on being smokers but also involve in transmitting the person to next steps of being addicted by cigarette (24). Afrasiabi also found the same result (25).

The second abstract norm which affects cigarette smoking was to have smoking parents. This is compatible to Bagher Vafaei's study results. In this study 60% of students stated that at least one of their family members was smoker (26).

Other norms influencing students' intention were, in turn, smoking scholars in universities, TV stars, their siblings who were smokers. Govari conducted a study to measure attitude of Kerman city university students and affirmed this result (27).

Various researchers show that smoking is usually begun from adolescence period. In his study, Mojahed et al found the onset of smoking cigarette is mostly happened in 14 and 15 years old (19, 29).

Mehrabi et al. performed a research in which smoking was studied in 15-64 year old population. This study results found smoking decreased as the level of education elevated (28). Studied students implied lack of interesting hobbies and the curiosity as the first and second reasons of their smoking habit which is similar to Afrasiabi's study results (25). In contrast, this result is opposite to Hatami's study in which aggression removal is the first reason to get used to smoking (30).

The conclusions found the students with higher education parents had more negative attitude towards smoking rather than those with parent's lower education. It was not the same as Hashemi's research results. There is no significant relation between parents' education and smoking in university students in the latter study (31).

Making practical and efficient laws and also some logical limitations such as not smoking in front of adolescents, not selling cigarette to them and comprehensive training in according to qualified models and methods regularly on the basis of personal characteristics can be very effective (32).

This can be found through present study results in which knowledge education could not lead to attitude increase necessarily. Hence, it's implied that the methods and models to approach smoking must be changed undoubtedly. Controlling harmful behaviors such as smoking is one of the main health education goals, among which BASNEF Model is a successful model especially in developing countries. It also focuses on hidden factors affecting behavior immensely, in opposite of traditional models which consider only knowledge promotion.

Table 1: Frequency percentage of demographic characteristics of target group

		N	F
University	Razi	137	24.12
	Medical Sciences	121	21.3
	Azad Islamic	199	35.04
	Payamnoor	111	19.54
Education Level	Higher than diploma	198	34.86
	BS	307	54.5
	MS and PhD	63	11.9
Marital Status	single	479	84.33
	Married	89	15.67
Smoking Status	Every day use	172	30.28
	Some time use	396	69.72
Housing Status	Dormitory or rent housing	253	44.54
	Not dormitory or rent housing	315	55.46

Table 2: Frequency percentage of social norms of studied group

Social Norm		**Daily cigarette number**		**Some time cigarette number**		**P**
		N	F	N	F	
Smoking friends	Yes	142	82.56	139	35.1	<0.001
	No	30	17.44	257	64.9	
Smoking parents	Yes	128	74.42	119	30.05	<0.001
	No	44	25.58	277	69.95	
Smoking Scholars	Yes	112	65.12	107	27.02	0.014
	No	60	34.88	289	72.98	
TV stars	Yes	107	62.21	94	23.74	0.027
	No	65	37.79	302	76.26	
Smoking siblings	Yes	79	45.93	107	27.02	0.032
	No	**93**	**54.07**	**289**	**72.98**	

Table 3: Frequencies percentages of enabling factors of studied group

Enabling factors	**N**	**F**
Easy access to cigarette	141	24.83
Low price of cigarette	128	22.54
Free smoking in university or dormitory	93	16.37
Free smoking places like inns & parks	45	7.92
Purchase cigarette for parents	88	15.49
Proposed cigarette by friends	73	12.85
Total	**568**	**100**

Acknowledgement

We are thankful all studied students and the managers of all Kermanshah's universities.

Keypoints:

- An attempt was carried to find the pattern of smoking among Kermanshah city.
- The average of daily cigarette numbers was 10.7.
- There are no any relationship between cigarette numbers and university level.

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