

## **Research Paper:**





# Perspectives and Reasons for Smoking Tendency in Youth

Amin Arabshahi¹ 🕞, Siamak Mohebi¹, Zabihollah Gharlipour¹\* 🕞

1. Department of Health Education and Promotion, Faculty of Health, Qom University of Medical Sciences, Qom, Iran.



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## **ABSTRACT**

Background & Aims of the Study: Recently, smoking, as a critical risk factor, increased the diseases burden, especially chronic and non-communicable conditions, such as cardiovascular, respiratory, cancer, and stroke. Smoking is highly prevalent for various reasons. Therefore, this study aimed to investigate the views and causes of smoking tendency in the youth of Qom City, Iran.

Materials and Methods: This qualitative research employed the content analysis method. The research environment consisted of all public places and the research population consisted of the youth of Qom City, Iran. In total, 19 participants were selected by the purposive sampling method. The required data were collected by semi-structured interviews, i.e., recorded, transcribed, and analyzed with the consent of the study participants. Qualitative content analysis was used to analyze the achieved data.

Results: Data analysis provided 3 main categories of environmental factors, individual, family, and 8 subcategories that included cultural acceptability, stimulants, economic and social issues, attitude toward smoking, curiosity and excitement, family supervision and control, relationships within the family, and substance dependence in family members.

**Conclusion:** Smoking and hookah use in youth is a multi-factor and multi-level phenomenon. Besides, the factors determining the tendency to them are at various environmental, individual, family levels; thus, they should be considered in the prevention, control, and smoking cessation of hookah.

Zabihollah Gharlipour, PhD.

Address: Department of Health Education and Promotion, Faculty of Health, Qom University of Medical Sciences, Qom, Iran.

**Phone:** +98 (25) 37833595 **E-mail:** gharlipourz@yahoo.com

<sup>\*</sup> Corresponding Author:



## 1. Introduction

obacco is the cheapest addictive substance available to the general public. It has little social ugliness; therefore; it is very easy to use for young individuals. Tobacco use kills 6 million individuals annually. Moreover, half of the current smokers eventually die from a tobacco-related illness [1]. The prevalence of tobacco use in the country is estimated to be 13.9% (21.7% in men & 3.6% in women) based on a meta-analysis study data [2]. Tobacco consumption leads to 6.9% of lost life years and 5.5% of disability based on the adapted life years index for disability [3]. Smoking is the leading cause of 90% of lung cancers, 40% of other cancers, 50% of cardiovascular diseases, 75% of respiratory diseases, 12% of deaths, and 30% of deaths occur between the ages of 30 and 50 years [4]. The World Health Organization estimates that the frequency of individuals who will die from tobacco-related diseases by 2020 equals 8.4 million annually [5].

Developing countries account for 70% of the world's total tobacco use; approximately two-thirds of tobacco-related deaths occur in developing countries [6]. There are currently about one billion smokers worldwide. Additionally, it is estimated that another one billion younger adults will start smoking by 2030 [7]. In the United States, smoking is the leading cause of disability and death, with an estimated 440000 cases dying from smoking per year [8].

Smoking plays a major role in creating poverty in lowincome countries. Accordingly, the cost that should be spent on food and health is used to buy cigarettes [4, 9, 10]. Various studies highlighted that the prevalence of smoking among young individuals is increasing [11-14]. If smokers quit before the age of 30 years, the risk of premature death and mortality is reduced by 90% in them; if they quit smoking by the age of 50 years, this statistic is reduced by half [15]. Several factors are involved in the occurrence of smoking behavior. Research indicated that curiosity, hobbies, the presence of smokers in the family, low educational level of parents, having smoking friends, personality traits, positive and exciting reports of peers concerning smoking experience, and the poor cultural status of society are among the influential factors in smoking [8, 16].

Some studies revealed that the feeling of pleasure from smoking and reducing anxiety due to it are among the major causes of smoking [4, 17]. Smoking may be associated with other behavioral problems with the common goal of conveying the image of being strong and maturing to one's peers [18]. In the study of Razavi et al., gaining peace, dissatisfaction with life, relieving fatigue, the insistence of friends and relatives, unemployment, spending time and entertainment, being away from family, personal interest and gaining pleasure, showing off, declaring independence, and imitating were mentioned as factors associated with smoking tendency. Among these, the role of friends was recognized as a strong predicting factor [19].

In addition to cigarettes, tobacco is used in various other ways, like hookah. Iran, India, and Turkey are the first-ranked users of hookah. Social statistics signified that smoking hookah has become a social phenomenon; this practice is common among young subjects [4]. Studies on the harms of hookah use addressed an increased risk of cancers of the mouth, stomach, esophagus, and lungs, decreased respiratory function, and reduced fertility. Hookah users also have manifested higher levels of carboxyhemoglobin in their blood than non-users [20]. Various studies determined that 80% of girls and boys smoke hookah for fun [21]. Numerous factors, such as different attitudes and beliefs about the harms of hookah less than smoking, easy access, and low cost are involved in the prevalence of hookah use [22, 23]. Furthermore, misconceptions about its safety, social acceptance, and the availability of different flavors are also effective in the prevalence of hookah use [24].

Mazik et al. believe that aromatic and fruit-flavored tobacco significantly impact the popularity and increase of hookah consumption among the young population [25]. There exists data on the high mortality rate due to smoking, its proven effects on various diseases, adverse social effects, increased inclination to smoking and hookah, and the high cost of tobacco production. Additionally, the prevalence of tobacco use is increasing in our country. Thus, the present study aimed to analyze the views and causes of smoking tendency in the youth of Qom City, Iran, in 2019.

## 2. Materials and Methods

This was qualitative research. Qualitative research explores the meanings, concepts, definitions, symbols, and descriptions of characteristics and emphasizes the intellectual categories of individuals to describe their behaviors [26]. Qualitative studies employ different methods. In the present study, the content analysis method was used. In the qualitative content analysis method, through the systematic classification process, codes and themes are identified. The content analysis examines beyond



the objective content derived from textual data; through which hidden themes and patterns can be revealed from the content of the study participants' data [27].

In the contractual or inductive content analysis of which the research model is present, the categories were obtained directly and from part to whole using raw data. Accordingly, immersing researchers in data allows them to gain new insights and perspectives. In qualitative research, the researcher can collect data using various methods, such as interviews, observations, reports, and written documents, or a combination of these sources or any source that helps to explain the concept. Interviews are among the most common methods of collecting qualitative data, which may be structured, semi-structured, or unstructured [28]. In this study, to discover participants' experiences about the research phenomenon, the interview method was used. To obtain rich data, the researcher used in-depth semi-structured interviews (i.e., conducted individually & face to face). The study population was young individuals who smoked in public places (parks, cafes, coffee shops, etc.). The study participants were selected by a goal-based method. In the interviews, a questionnaire was used and the questioning process depended on the answers provided by the tested individuals. Data collection continued until data saturation. For this purpose, the researcher interviewed public places. Additionally, the sample size is not predictable from the beginning of the research; accordingly, the researcher continues to collect data by guiding the research until the data is saturated. In other words, the researcher continues sampling until new data is obtained.

In this study, information saturation occurred when the 19th subject provided new information to the interviewer. The inclusion criteria of the study were as follows: smoking or hookah use in the last month; the age range of 17-37 years; living in the city; as well as the ability to participate and willingness to discuss the study subjects. The exclusion criteria included the unwillingness of the interviewee to cooperate with the research and substance use.

In a semi-structured interview, the researcher initially prepares the required topics to cover the information; however, not all questions are clear in advance and rely in part on the questions that arise in the interaction between the interviewer and the interviewee. Interviews by the researcher initiated with guiding questions, such as "Describe your view of smoking (cigarettes, hookah, pipe)? Why do you think most young individuals in Qom seek tobacco use? Follow-up and exploratory questions were also probed to obtained richer data and in-depth ex-

periences. For example, Could you explain more about this? Did you mean this? May you give an example?"

The interviews lasted from 30 to 45 minutes. All interviews were recorded by the IC Recorder and converted to audio files transferable to computer and text. After performing each interview, their text was transcribed verbatim and the data were analyzed by contractual content analysis. Ethical considerations were also observed by explaining the objectives of the study to the examined individuals as well as the voluntary participation in the study and obtaining informed consent forms.

To examine the collected data, 4 criteria of acceptability credibility, confirmability, dependability, and transferability were applied. To increase the acceptability or validity of the obtained data, a variety of samples were used. In other words, samples with different socio-economic and educational statuses were included. The coded text was returned to some research participants and the compliance of the selected codes with their opinions was checked. Moreover, to increase the validity of the collected data, the bracketing method was used. Besides, the researcher abandoned his assumptions about the study subject from the onset of the research.

Regarding data reliability, the researcher developed a complete record of activities on how to collect and analyze the data. Additionally, the collected data were read at least 5 times to better understand the narrations of the study participants. Accordingly, the deep and continuous mental conflict facilitated increasing the breadth and depth of the collected data. The data were verified by the review of 2 faculty members, including a PhD in health education and health promotion, who were familiar with qualitative research and data analysis. A rich description helps achieve the transferability item. The rich description refers to a valuable and complete description of the research site and the interactions and processes observed during the research. To achieve portability, the researcher increased portability by accurately describing the participants, including sampling method, data collection time, and location.

#### 3. Results

The current study findings suggested that 16 (84.2%) and 3(15.8%3) of the study subjects were male and female, respectively. Of 19 study participants, 9 (47.4%) aged 17-27 years and 10 (52.6%) aged 28-37 years. Respecting educational level, 6 (31.6%) study participants had a university degree (Table 1).



Table 1. Demographic characteristics of the research participants

Variables		No.(%)
Ago (v)	17-27	9(47.4)
Age (y)	28-37	10(52.6)
Educational level	Ninth-grade	8(42.1)
	Diploma	5(26.3)
	University degree	6(31.6)
Gender	Male	16(84.2)
	Female	3(15.8)
Marital status	Single	11(57.9)
	Married	5(26.3)
	Divorced	3(15.8)
	Unemployed	3(15.8)
Occupational status	Freelancer	10(52.6)
Occupational status	Student	4(21.1)
	Employee	2(10.5)



Most research participants' views on smoking concerned heart disease, respiratory disease, bad breath, etc.; however, despite being aware of the side effects of smoking, they were indifferent to it. The following 8 main categories were extracted following data analysis about the views and the causes of smoking tendency in the explored youth (Table 2).

#### A: Environmental factors

## Cultural acceptability

According to most of the investigated subjects, hookah use culture has long existed in Qom Province; this issue was identified among the main factors affecting its use. The prevalence of hookah use by family members and close friends was abundantly expressed by the research participants. The frequency of observing individuals using it has reduced the stigma of this practice; accordingly, it is considered a normal and pleasant activity. Smoking is very common among youth and teenagers. Moreover, every young subject who does not smoke seems to be different from others. "You know, the problem in our city is that families smoke and use hookah". "Especially hoo-

kah is not considered bad, and this issue has perfectly fit in our city". (25-year-old, 9th-grade education).

## **Stimulants**

The research participants believed that hookah and cigarettes were highly prevalent in the community and families due to their availability and low cost. In this regard, one examined subject stated: "Tobacco, both good and bad, is easily and cheaply available on every supermarket; all kinds of cigarettes and tobacco are presented in beautiful boxes, and coffee houses. There exist 3 coffee houses on this street, which young friends visit and smoke hookah without supervision/" (29-year-old, diploma).

## Socio-economic issues

The majority of study participants considered the lack of attractive entertainment in Qom as a factor for youth to seek smoking. The examined participants believed that hookah was a desirable method to have fun and be together and that it was often addressed as a group activity. "We have no entertainment in this city," he said. "We have no entertainment. There is nothing we can do. Show me a place of entertainment in this city so that we can go there to spend our leisure time". (25-year-old, 9th-grade).



Table 2. Main classes, subclasses, and codes extracted by data analysis

Main Categories	Subcategories (Themes)	(Codes)
	College	False patterning in society
	Cultural acceptability	Being popular in the community
		Availability
	Stimulants	Low cost
		Lack of strict contraceptive rules
A: Environmental factors		There was no healthy entertainment
		Unemployment
	Economic and social issues	Poverty
		The chaotic living environment
		The role of friends and peers
		Feeling great
	Type of attitude towards smoking	A sense of class
		Have a sense of independence
		Happiness and forgetfulness problems
	Sense of curiosity and excitement	Controlling anxiety and stress
B: Individual factors		Avoid fatigue
		Sense of peace
		Imitation
		Enjoy the taste and smoke of cigarettes and hookahs
		Experience
	Family supervision and control	Negligence and strictness in the family environment
		Exclude the child from the family environment
		Relationships within the family Conflict and conflict
C: Family factors		Separation of parents
		Lack of intimacy in the family environment
		Addiction father
	Substance dependence in family members	Older brother addiction
		Archives of Hygiene Sciences





Other essential causes of smoking and hookah use included unhealthy friendship groups, i.e., called bad friends. Relationships with smoking friends are among the main factors affecting smoking onset. One of the explored subjects declared the following about this issue: "Comrade, it has a great effect on an individual's substance dependence. For example, in a group or front of a guest, they complement you with cigarettes or hookahs. "If you do not smoke, a role model will look at you and you will be embarrassed or, e.g. you will be told that you are afraid to smoke". (22-year-old, diploma).

The main characteristic that probably manifests a significant impact on the formation of a subject's personality is the place of residence. Childhood and adolescence are critical periods in an individual's life and play a decisive role in the formation of personality. For example, a study participant mentioned: "We live downtown. The entertainment of young individuals downtown is smoking hookah and cigarettes; however, the question is whether or not it is also the entertainment of those who live in the classier part of the city or good environments? Well, certainly not". (27-year-old, university degree).

#### **B:** Individual factors

## Attitude towards smoking

One of the most common motivations for smoking and hookah use in the views of youth is showing off, expressing oneself, and feeling classy. Young individuals and adolescents choose smoking as the best way to attract attention and be considered special. In this regard, one of the study subjects stated: "In the city of Qom, if anyone wants to have bullying claims and claim grew up, they say I am "starting to smoke". (23-year-old, diploma).

Another reason for smoking cigarettes and hookahs is the reluctance and lack of self-esteem. Most individuals believed that smoking is the best method to cope with stress and forget about problems. In this case, a young man declared: "When a person wants to solve a series of needs and mental problems on a part-time basis, they seek smoking or hookah use. Tobacco is like a painkiller that only makes an individual feel good for a few hours, i.e., just indoctrination". (28-year-old, university degree).

## Sense of curiosity and excitement

Every day, a taste is added to the types of hookah tobacco or a new type of cigarette becomes available in the market, i.e., very attractive for consumers. The research participants demonstrated pleasant remarks about the smoke coming from smoking or hookah or the fruity flavors of the hookah. One study subject stated the following in this respect: "When I was a middle-school student, I used to pipe a piece of paper, set it on fire, and smoke it. I liked to smoke it". (22-year-old, university degree).

#### C: Familial factors

## Family supervision and control

Most of the research participants stated that the poor communication in the family and the lack of family supervision leads the subject to enter spaces that have less family supervision and increase the young person's tendency to risky behaviors, like smoking hookah or cigarettes. "Our house has no supervision over the child and communications. My father never asked me about where I was going, what I was doing, or where I have been at this time of night," one of the explored youth mentioned. Violent and repulsive treatment by families is not beneficial in numerous cases and isolates this population and aggravates smoking and hookah use and possible drug use. One study subject indicated that: When my father found a pack of cigarettes in my pocket, he slapped me in front of my siblings and mentioned, "Get out of the house, it was as if the world has come to end for me" (26-year-old, diploma).

#### Family interactions

The role of the family, as the main unit and the influential element on relationships, behaviors, as well as intrinsic and acquired characteristics of members is unquestionable. The impact of individuals in this small social symbol of each other has always made the family the main element of social studies. Scholars measured its impact on the individual or social successes or injuries in different contexts. Some of the study participants felt dissatisfied with their tense situations and family disputes. The prevailing atmosphere of such families is full of anxiety and mistrust. Family members are always in disagreement and have no mutual understanding. Healthy and stress-free relationships are impossible and underestimate the education and personality development of children. A study subject stated: "I have had fights in our house since ever. My father beats us all. Family quarrels greatly affect the child's mental health. That is why the child likes to go out of the house and spend most of the time outside the house with friends, and do not want to come back home". (33-year-old, 9th-grade).



Substance use disorders in family members

Reasons that contribute to most youth's tendency to smoking hookah or cigarettes are substance use disorders in family members. Being born into a family that uses hookah increases the odds of smoking in children, compared to healthy families. This is because the parents are the first to be imitated by the child. This important topic was extracted from concepts, such as substance abuse in the father or older brother, the preparation of hookah for the father, substance consumption in the family, the regular use of hookah in the family, and substance abuse in relatives and acquaintances. Accordingly, one of the explored subjects stated: "My father used to invite his friends in our house and play cards with them. My brothers and I used to sit and watch. My father and his friends used to smoke hookah and cigarettes together while playing cards. Then, they told me to empty the cigarette holder. I used to go and smoke the cigarettes that were still lit to see what it tasted like". (35-year-old, middle school education).

Another study participant also mentioned: "In my family, father, mother, uncles, and cousins all smoke hookahs. When I was a child, they also complimented me". (29-year-old, 9th-grade).

## 4. Discussion

The present study data suggested smoking tendency in the youth of Qom City, Iran. Data analysis indicated 8 subcategories, including cultural acceptance, stimulants, socio-economic issues, attitudes toward smoking, curiosity and excitement, family supervision and control, relationships within the family, and substance dependence in family members.

Culture consists of a set of norms, values, and patterns accepted in society, i.e., passed to the next generation. The present study data were in line with those of Jahanpour et al. [29] concerning the effect of culture on youth's tendency to smoke. Hookah use seems to be highly prevented in Qom households. The traditional society of Qom has never been against hookah use. This is because it is considered a domestic culture. The hookah has long existed in the customs of our country, especially in Qom. Accordingly, families never estimated it as serious harm. They believe that hookah is harmless; thus, that its use in recent years is a kind of pride among youth.

Other factors that lead to smoking in the young population include a family characteristic that prone individuals to use tobacco. Factors, such as poor communication in

the family, negligence, and strictness of parents on the performance of children, and smoking in family members are other influential characteristics in this respect. The households in Qom are affected by smoking, i.e., among the essential reasons for reducing the relevant stigma and considering the use of cigarettes and hookahs as a not so bad and unconventional practice. Smoking and hookah use from a close view (smoking in the family) in families in Qom refers to the situation and context in which a subject, from the beginning of his individuality and socialization, is encountered with smoking. Accordingly, the individual observes smoking daily and its defective behavioral necessities up close. Observing smoking, and in some cases, substance use in the family can be considered as the main reasons for the defects of the first family group.

The results of the study were in line with those of Afrasiabi [30] and Jahanpour [29]. Another issue that is worth noting is learning. Learning indicates that an individual learns to smoke and use hookah from others; this issue is rooted in their childhood when they learn smoking from parents and other family members. In general, the presence of a smoker in the families of Qom City leads to adolescents' and young individuals' smoking tendencies. Smoking in family members, as a role model, can be effective in imposing youth consumption conditions. These results were consistent with those of other studies [31], including Pirdehghan [6], Rahimzadeh [32], Mohammadi [33], Meysamie [9], Nazemi [34], Patel [35], and Karadoğand [16].

In a study by Pirdehghan [6] and Moeini [36], the lack of intimacy and family problems were considered as risk factors for smoking in adolescents. Mannocci et al. [37] mentioned the lack of intimate relationships in the family as a cause of smoking. Mohammadkhani S, Rezaee Jamaloee study [4] revealed that family conflicts are significantly related to smoking and hookah use. In this regard, research by the Center for Substance Abuse Prevention revealed that the dysfunction of the family and poor bonds between parents and children cause adolescents to tend to use substances. Perhaps, the level of parental supervision over young individuals, as reliable guardians, is the primary protective factor in high-risk behaviors. Moreover, restricting, monitoring, and controlling youth behaviors by parents, especially mothers, play an important role in reducing the risk of risky behaviors. The current investigation results indicated that environmental underlying factors include problems in society, such as the availability and low cost of tobacco products, poverty, unemployment, peer pressure, and the lack of contraindications in public places.



Some friends consider smoking a norm for accepting their friendship; thus, these conditions prone young people to multiple desires and challenges, like smoking. This is how youth develop strategies and actions, such as matching with friends and role-modeling to be able to connect with a group of friends. The obtained data were in line with those of Afrasiabi [30] and Amin al-Ruaya [38] As per Pirdehghan [6], Meysamie [9], Heidari [39], and Karadoğan [16] having a smoking friend, especially a close smoking friend, and participating in the gathering of smokers and encouragement from friends is related to smoking in young individuals, i.e., consistent with our study findings. Friendly environments in tobacco dependence greatly impact the youth of Qom.

Another essential factor is coffee shops, which are a place to spend leisure time. Young individuals visit such places in their free time and have no suitable job and income to fill their leisure time otherwise. The lack of healthy and suitable sports and recreational facilities along with the excessive increase of coffee shops was a major factor in seeking hookah use among the study population. The examined subjects considered smoking and hookah use primarily for fun and entertainment and to fill leisure time. Over time, that practice can lead to over-indulgence. These results were in line with those of Afrasiabi and associates [40]. Moreover, Moeini [36] and Meysami [9] highlighted the lack of hobbies and entertainment as the most important factors in the tendency to smoke. In other words, hookah use is a socio-cultural practice in Oom. Individuals use hookah to come together and provide a space for collective dialogue and expression.

The study subjects stated that one of the reasons for the tendency of young people to smoking can be easy access and low cost of tobacco products. The present study results were consistent with those of Nazemi [34], Rahimzadeh [32], and Arazi [41]. They argued that a reason for the smoking tendency in youth is the ease of access and its low cost.

Cigarettes and hookahs are more easily and abundantly available to the general public. Furthermore, their social stigma is not significant; thus, individuals, especially youth, use them very easily. To manage this problem, measures, such as increasing the price of tobacco, restricting distribution, increasing the necessary training on the dangers of smoking and hookah, and developing recreational facilities among young people are proposed.

An individual factor in smoking tendency is a positive attitude towards smoking, which includes feeling classy and smoking cigarettes for grief and protest gestures. There is no limit to the use of hookah among numerous families, especially the affluent. This issue sometimes finds a fashion aspect among young boys. This is because, through them, they attract others' attention. Most of the research samples considered the effect of presenting smoking in the media to create a positive attitude towards smoking ing in young individuals to be very high, i.e., in line with the results of the study by Shahbazi et al. [42].

There is an unscientific relationship between smoking and courage, success, and stress management in movies. In a study of 110 feature films, 60 movie characters used cigarettes to control stress [42]. The wrong attitude also includes increasing self-confidence, feeling great, relieving fatigue, and forgetting the problems in the present study, i.e., in line with the results of the study of Mahmoudi and associates [33]. Karimi et al. found that misconceptions about smoking were common among the study subjects. For example, 37% of the examined adolescents believed that smoking was effective in relieving fatigue, and 35% suggested that smoking alleviates anger. Furthermore, 14% of the study subjects believed that smokers seemed more attractive. Karimi's study data were consistent with those of the present study. The current research findings were in line with those of Kasiri et al. [43]. Numerous participants mentioned the reason for their tendency to smoke to be forgetting problems, and the relaxation induced by cigarettes and hookah. Thus, due to a lack of self-confidence and necessary stress management skills, the explored subjects choose to smoke and indoctrinate; accordingly, smoking plays an essential role in creating happiness and reducing stress.

The current study findings indicated that emotion seeking was significantly related to smoking and hookah use. Young people with high levels of arousal tend to use substances, such as cigarettes and hookahs because of the desire to experience levels of risk-taking and adventure to increase happiness and relief boredom from monotonous activities and life plans. The results of Mohammad Khani's study were similar to those of our study concerning the relationship between emotion seeking and smoking [4]. In general, due to diversity and risk-taking, and sensitivity to the monotony of excited individuals, if the right conditions for experiencing excitement and energy discharge are not provided, the tendency to smoke and hookah will increase in them. Especially in cities, like Qom where it is impossible to spend leisure time well, these subjects are more exposed to irrational activities, such as smoking and hookah use for excitement.



A limitation of the present study was faced in coffee shops. This is because the coffee shop owners refused to permit o the researcher to discuss with hookah users and most of them were worried that their coffee shops would be closed. Another limitation is the lack of a suitable place for interviews, and most of the interviews took place in parks and coffee shops, i.e., crowded and noisy.

#### 5. Conclusion

Overall, the present study data indicated that critical factors, such as family circumstances, group of friends, non-implementation of contraceptive laws in public, improper entertainment, poverty, unemployment, and the availability and low cost of tobacco products play a crucial role in the consumption of cigarettes and hookahs among the youth. Therefore, it is suggested that workshops be held for parents to introduce the harms of smoking and other tobacco products to their children. They could also teach appropriate educational models to manage their effective behavior on children and prevent various deviations. According to the obtained data, the measures and prevention strategies of family life should be taught to children from an early age. Moreover, by encouraging parents to take relevant training courses, the level of awareness of families could be increased. Furthermore, the country's cultural affairs officials can reduce smoking tendency in young individuals by setting up recreational and entertainment places, as well as creating jobs to fill the youth's time. Additionally, it is necessary to provide life skills training classes, as well as educate and convince youth to modify their attitudes about the harmfulness of smoking and hookah and to correct misconceptions, like the relieving effect of smoking.

## **Ethical Considerations**

## Compliance with ethical guidelines

This article was approved by Ethics Committee of Qom University of Medical Sciences (Code: IR.MUQ. REC.1398).

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#### Authors' contributions

Conceptualization and supervision: Amin Arabshahi, Zabihollah Gharlipour; Methodology: Amin Arabshahi, Siamak Mohebi; Investigation, writing - original draft, and editing: All authors; Data analysis: Amin Arabshahi, Zabihollah Gharlipour; Funding acquisition and resources, data collection: Amin Arabshahi.

#### Conflict of interest

The authors declared no conflicts of interest.

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#### References

- [1] WHO. Tobacco: The Problem. Fact sheet N 339. [Internet] 2015 Jul 6 [cited 2015 Aug 22]. https://www.who.int/nmh/publications/fact\_sheet\_tobacco\_en.pdf
- [2] Moosazadeh M, Ziaaddini H, Mirzazadeh A, Ashrafi-Asgarabad A, Haghdoost A A. Meta-analysis of smoking prevalence in Iran. Addiction & Health. 2013; 5(3-4):140-53. [PMID][PMCID]
- [3] Ng M, Freeman MK, Fleming TD, Robinson M, Dwyer-Lindgren L, Thomson B, et al. Smoking prevalence and cigarette consumption in 187 countries, 1980-2012. Journal of the American Medical Association. 2014; 311(2):183-92. [DOI:10.1001/jama.2013.284692] [PMID]
- [4] Mohammadkhani S, Rezaee Jamaloee H. [Relationship between cigarette and hookah smoking with individual, family and social factors in adolescents (Persian)]. Journal of Sabzevar University of Medical Science. 2016; 23(2):262-80. http://jsums.medsab. ac.ir/article\_839.html?lang=en
- [5] Rahnavard Z, Mohammadi M, Rajabi F, Zolfaghari M. [An educational intervention using health belief model on smoking preventive behavior among female teenagers (Persian)]. Journal of Hayat. 2011; 17(3):15-26. http://hayat.tums.ac.ir/article-1-51-en. html
- [6] Pirdehghan A, Vakili M, Arab M, Aghakoochak A. [Smoking frequency and modeling the underlying predicting factors of tobacco smoking among high school students in Yazd City, 2012 (Persian)]. Journal of Shahrekord Uuniversity of Medical Sciences. 2014; 16(5):56-65. http://78.39.35.44/article-1-1820-en.html
- [7] Barati M, Niknami S, Hidarnia A, Allahverdipour H. [Predictors of tobacco smoking in male adolescents in Hamadan based on the theory of planned behavior (Persian)]. Journal of Education Community Health. 2014; 1(3):28-37. [DOI:10.20286/jech-010364]
- [8] Javadzade S H, Shahnazi H, Sharifirad G, Reisi M, Tavassoli E. [The status of knowledge and belief of pre-university male students in Isfahan, Iran, on smoking and its harmful effects and the prevalence of smoking among them (Persian)]. Journal of Health System Research. 2013; 9(6):587-93. https://hsr.mui.ac.ir/article-1-651-en.html



- [9] Meysamie A, Mahdiin Z, Seddigh L. [Frequency of tobacco use among students in Tehran city (Persian)]. Tehran University Medical Journal. 2015; 73(7):515-26. https://tumj.tums.ac.ir/ browse.php?a\_id=6913&sid=1&slc\_lang=en
- [10] Hosseinian M, Nouri R, Moghadasin M, Esalatmanesh S. [Prediction cigarette and Water-Pipe use among university students based on the adjustment to the university. Mental Health and motivation for use (Persian)]. Journal of Research in Psychological Health. 2018; 12(2):86-101. https://rph.khu.ac.ir/article-1-3121-en.html
- [11] Amin-Esmaeili M, Rahimi-Movaghar A, Yunesian M, Sahimi-Izadian E, Moinolghorabaei M. Trend of smoking among students of Tehran University of Medical Sciences: Results from four consecutive surveys from 2006 to 2009. Medical Journal of the Islamic Republic of Iran. 2013; 27(4):168-78. [PMID] [PMCID]
- [12] Barnett TE, Smith T, He Y, Soule EK, Curbow B A, Tomar SL, et al. Evidence of emerging hookah use among university students: A cross-sectional comparison between hookah and cigarette use. BMC Public Health. 2013; 13(1):302. [DOI:10.1186/1471-2458-13-302]
- [13] Chkhaidze I, Maglakelidze N, Maglakelidze T, Khaltaev N. Prevalence of and factors influencing smoking among medical and non-medical students in Tbilisi, Georgia. Jornal Brasileiro de Pneumologia. 2013; 39(5):579-84. [DOI:10.1590/S1806-37132013000500008] [PMID] [PMCID]
- [14] Martins SR, Paceli R B, Bussacos MA, Fernandes FLA, Prado GF, Lombardi EMS, et al. Experimentation with and knowledge regarding water-pipe tobacco smoking among medical students at a major university in Brazil. Jornal Brasileiro de Pneumologia. 2014; 40(2):102-10. [DOI:10.1590/S1806-37132014000200002] [PMID] [PMCID]
- [15] Hamadeh RR, Ahmed J, Al Kawari M, Bucheeri S. Smoking behavior of males attending the quit tobacco clinics in Bahrain and their knowledge on tobacco smoking health hazards. BMC Public Health. 2018; 18(1):1-9. [DOI:10.1186/s12889-018-5104-7]
- [16] Karadoğan D, Önal Ö, Kanbay Y. Prevalence and determinants of smoking status among university students: Artvin Çoruh University sample. PloS One. 2018; 13(12):e0200671. [DOI:10.1371/ journal.pone.0200671]
- [17] Mattsson K, Hougaard KS, Sejbaek CS. Exposure to psychosocial work strain and changes in smoking behavior during pregnancy-a longitudinal study within the Danish National Birth Cohort. Scandinavian Journal of Work, Environment & Health. 2021; 47(1):70-7. [DOI:10.5271/sjweh.3921][PMID] [PMCID]
- [18] Rashidi M, Khoramabadi Y, Ahmadi Tahour Soltani M, Keshavarz Afshar H, Jafari E, Akbari S. [The comparison of smoking predisposition factors and risky behaviors in smoker and non-smoker soldiers (Persian)]. Journal of Police Medicine. 2017; 6(2):135-42. http://jpmed.ir/article-1-434-en.html
- [19] Razavi S. [The earliest Age, place and recommendation and most important motivation for cigarette smoking in city of Yazd (Persian)]. Journal of Yazd University of Medical Sciences and Health Services Shahid Sadoughi. 2001; 8(1):12-7. https://www. sid.ir/fa/journal/ViewPaper.aspx?ID=29167
- [20] Barbouni A, Hadjichristodoulou C, Merakou K, Antoniadou E, Kourea K, Miloni E, et al. Tobacco use, exposure to second-hand smoke, and cessation counseling among health professions students: Greek data from the Global Health Professions Student Survey (GHPSS). International Journal of Environmental Research and Public Health. 2012; 9(1):331-42. [DOI:10.3390/ijerph9010331]

- [21] Mostafapoor A, Yazdanpanah L. [A study of social factors affecting the consumption of tobacco: The case of Boukan Citizens (Persian)]. Journal of Social Problems of Iran. 2015; 6(2):353-72. [DOI:10.22059/IJSP.2015.58568]
- [22] Taraghi Jah S, Hamdiye M, Yaghubi M. [Predictor factors of smoking and hookah use in governmental universities (Persian)]. Research in Medicine. 2011; 34(4):249-56. http:// pejouhesh.sbmu.ac.ir/article-1-811-fa.html
- [23] Khani Jeihooni A, Khiyali Z, Kashfi SM, Kashfi SH, Zakeri M, Amirkhani M. Knowledge and attitudes of university students towards hookah smoking in Fasa, Iran. Iranian Journal of Psychology and Bahavioral Science. 2018; 12(1): e11676. [DOI:10.5812/ijpbs.11676]
- [24] Martinasek MP, McDermott RJ, Martini L. Waterpipe (hookah) tobacco smoking among youth. Current Problems in Pediatric and Adolescent Health Care. 2011; 41(2):34-57. [DOI:10.1016/j.cppeds.2010.10.001]
- [25] Maziak W, Eissenberg T, Rastam S, Hammal F, Asfar T, Bachir ME, et al. Beliefs and attitudes related to narghile (waterpipe) smoking among university students in Syria. Annals of Epidemiology. 2004; 14(9):646-54. [DOI:10.1016/j.annepidem.2003.11.003][PMID]
- [26] Corbin J, Strauss A. Basics of qualitative research: Techniques and procedures for developing grounded theory. Los Angeles: Sage Publications; 2014. https://books.google.com/books?id=hZ6kBQAAQBAJ&dq
- [27] Hidi S, Baird W. Interestingness-A neglected variable in discourse processing. Cognitive Science. 1986; 10(2):179-94. [DOI:10.1207/s15516709cog1002\_3]
- [28] Jamshed S. Qualitative research method-interviewing and observation. Journal of Basic and Clinical Pharmacy. 2014; 5(4):87-8. [DOI:10.4103/0976-0105.141942] [PMID] [PMCID]
- [29] Jahanpour F, Vahedparast H, Ravanipour M, Azodi P. [The trend of hookah use among adolescents and youth: A qualitative study (Persian)]. Journal of Qualitative Research in Health Sciences. 2015; 3(4):340-8. http://jqr1.kmu.ac.ir/ article\_91078.html
- [30] Afrasiabi H, Maddahi J. [A qualitative study about social context of cigarette smoking among students in men dormitory (Persian)]. Strategic Rssearch on Social Problems in Iran University of Isfahan. 2017; 5(4):79-98. [DOI:10.22108/ SSOSS.2017.21277]
- [31] Lotfi Y, Ayar A. The effects of informative programs on the change of attitude and consumption of drugs. Procedia-Social and Behavioral Sciences. 2012; 35:195-204. [DOI:10.1016/j.sbspro.2012.02.079]
- [32] Rahimzadeh M, Rastegar H, Fazel Kalkhoran J. [Prevalence and causes of tendency to cigarette and water pipe smoking among male and female physical education students in University of Kurdistan (Persian)]. Journal of Health. 2016; 7(5):680-6. http://healthjournal.arums.ac.ir/article-1-1098-en.html
- [33] Mohammadi F, Zakarianejad M, Valizadeh F. [Determinants of smoking behavior among male high school students in Babolsar, Iran (Persian)]. Journal of Mazandaran University of Medical Sciences. 2014; 24(116):216-22. http://jmums.mazums.ac.ir/article-1-4338-en.html



- [34] Nazemi S, Chaman R, Davardoost N. [Prevalence and reasons of inclination towards smoking among university students (Persian)]. Knowledge and Health. 2012; 7(3):107-11. [DOI:10.22100/jkh.v7i3.128]
- [35] Patel J, Angolkar M, Murthy S, Mallapur MD. Prevalence of tobacco consumption and its contributing factors among students of a private medical college in Belgaum: A cross sectional study. Ethiopian Journal of Health Sciences. 2016; 26(3):209-16. [DOI:10.4314/ejhs.v26i3.3] [PMID] [PMCID]
- [36] Moeini B, Allahverdipour H. [Cigarette use and its predicting factors among male high school students. journal of urmia nursing and midwifery faculty (Persian)]. Nursing and Midwifery Journal. 2011; 8(4):237-45. http://unmf.umsu.ac.ir/article-1-248-fa.html
- [37] Mannocci A, Semyonov L, Saulle R, Boccia A. Evaluation of the association between acne and smoking: Systematic review and meta-analysis of cross-sectional studies. Italian Journal of Public Health. 2010; 7(3):256-61. https://citeseerx.ist.psu.edu/ viewdoc/download?doi=10.1.1.950.8459&rep=rep1&rtype=pdf
- [38] Aminoroaia M, Attari A, Maracy M. Factors affecting medical students' tendency to smoke cigarettes. Journal of Research in Behavioural Sciences. 2013; 10(7):726-34. https://scholar.google.com/scholar?hl=en&as\_sdt=0%2C5&q=Factors+affecting+medical+students%E2%80%99+tendency+to+smoke+cigarettes&btnG=
- [39] Heydari G, Sharifi H, Hosseini M, Masjedi M. Prevalence of smoking among high-school students of Tehran in 2003. Eastern Mediterranean Health Journal. 2007; 13(5):1017-21 [DOI:10.26719/2007.13.5.1017]
- [40] Afrasiabi H, Amirmohammadi ZA. [Qualitative investigation of smoking hookah among youth of Jiroft City (Persian)]. Strategic Research on Social Problems in Iran. 2018; 7(1):65-80. [DOI:10.22108/SSOSS.2018.105138.1114]
- [41] Arazi H, Hosseini R, Rahimzadeh M. Comparison of cigarette and hookah smoking between physical education and non-physical education students. Pars of Jahrom University of Medical Sciences. 2013; 11(3):57-63. [DOI:10.29252/jmj.11.3.57]
- [42] Shahbazi H, Baghianimoghadam MH, Zinalabediny M, Amoie A, Zolghadr R. [View of city of Yazd citizens on the impact of visual media on the prevention and incidence of smoking among adolescents and young adults (Persian)]. 2013; 1(3):33-46. http://journal.ihepsa.ir/article-1-61-en.html
- [43] Kassiri H, Rafiee A, Haghighizadeh MH, Kazemzadeh N. [Epidemilogy of cigarette smoking among male students of Ahvaz Jundishapur university of medical sciences, Iran (Persian)]. Jundishapur Scientific Medical Journal. 2011; 2(2):75-84. https://www.sid.ir/fa/journal/ViewPaper.aspx?ID=178007

