



Factors that Contribute in the First Hookah Smoking Trial by Women: A Qualitative Study from Iran

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Abstract

Background: Hookah smoking is growing in popularity especially among women but little is known about the determinants influencing on hookah smoking initiation. In order to address this emerging health risk, a qualitative study was conducted to explore the factors that contribute in the first hookah smoking trial by women.

Methods: This qualitative study was conducted during 2012 to 2013 in Tehran, Iran. Participants were recruited to represent diversity in smoking status, ethnicity, age groups and residence. Data was collected through in-depth individual interviews and was analyzed through content analysis.

Results: Four main themes were identified from the qualitative data including: Positive attitude toward hookah smoking; Social and family facilitators; Psychosocial needs and gaps and Sensory characteristic of hookah.

Conclusion: From this study, a variety of factors which contribute to the initiation of hookah smoking among women have been identified. Since one of the major causes of increased hookah smoking may be its ordinary use, all factors causing the ordinary use should be eliminated, and efforts should be made in opposition to hookah smoking promotions.

Keywords: Waterpipe, Hookah, Ghelyan, Qualitative research, Tobacco, Smoking, Woman

Introduction

Hookah is a traditional method of smoking tobacco, especially in the Eastern Mediterranean Region (EMR) and the Middle and Far East (1). However, in the past 2 decades it has increased in popularity in other parts of the world (2).

Although many more men use tobacco than women and women make up only about 20% of the world's one billion smokers, there is evidence that the epidemic of tobacco use among girls is increasing in some countries and women are a ma-

major target for the tobacco industry in its effort to recruit new users to replace those who will quit or die prematurely from tobacco-related diseases (3). The advent of a flavored tobacco, called maassel, along with its mystic appeal, novelty, affordability, and the social atmosphere in which smoking often occurs, has made hookah smoking attractive to women as well as men (2).

According to a systematic review about the side effects of hookah smoking, hookah smoking is

significantly associated with a number of deleterious health outcomes such as lung cancer, oesophageal cancers, cardiovascular disease and adverse pregnancy outcomes such as low birth weight(4). In spite of these deleterious health effects, hookah smoking is widely believed to be a less harmful form of tobacco smoking (5) and a safer alternative to cigarette smoking (6).

The results of a national survey in Iran in 2007 showed that more than half of tobacco smoking women (e.g., 1.9% of overall 3.2%) smoke tobacco employing hookah, and in Iranian women hookah smoking has become the most common method of tobacco smoking (7).

Because of rapid increases in hookah use in Iranian women and the harmful effects of smoking on women's health including their reproductive health, more data are needed regarding the factors that influence hookah smoking initiation among women. This study is qualitative phase of a sequential exploratory mixed methods study which aims to explore the influence of different factors on the initiation of hookah smoking in women and then develop the "Hookah Smoking Initiation for Women Questionnaire (HIWQ)"; and, determine the psychometric properties of the HIWQ. Most Iranian studies associated with smoking are carried out quantitatively. They have focused on cigarette smoking (8,9) and some scholars in recent years (10,11) have examined the causes of hookah smoking in both men and women. But they used the same questions, gathered from literature review, for measurement hookah smoking causes in both genders, despite the fact that risk factors for smoking may vary by gender (12) and also the factors related to smoking initiation or maintenance may be different in women from men (10) and the culture of Iranian women is different from women in other countries. Thus there is an urgent need to develop a questionnaire to measure the onset reasons of hookah use for Iranian women. The information of such questionnaire would help develop health promotion initiatives and interventions that specifically address women. Such understanding is also useful for development of smoking cessation strategies that are appropriate for women.

In this article the role of psychosocial needs and gaps, as a risk factor associated with the initiation of hookah smoking among women, is discussed.

Methods

In this research, a qualitative approach was adopted using in-depth interviews in Tehran in 2012. The inclusion criteria were: being a woman, being a resident of Tehran, and having a history of hookah smoking even as much as one or two puffs. Interviewees were carried out by an investigator who was familiar with the principles of qualitative approach and she had practical experience in qualitative research. Participants were recruited from different characteristics, in terms of age, education, marital status, occupation, geographic region and the age at onset of hookah smoking, to ensure that women from diverse demographic backgrounds are present in the interviews. These women had different patterns of hookah smoking and we classified them as current and former user of hookah. In this study every women how had a history of hookah smoking at least once and she wanted to continue hookah smoking after this was defined as a current smoker. Women who had a history of hookah smoking at least once and she claimed that she had abandoned it, was defined as a former smoker.

Participants were sampled purposively from universities, hospitals, through home visits, leisure centers and cafes following a snowballing technique where one person would put the researcher in touch with her friends, colleagues, and other contacts who smoked hookah.

The questions that were used to guide the participants in the interviews include: "Why do people start to smoke hookah?" In what circumstances and where did you smoke hookah for the first time?" "Who was with you at the first session of hookah smoking?" and, "Did anyone encourage you to smoke hookah?". A demographic and pattern of hookah use questionnaire which was developed by the researchers was used before each interview. The questionnaire included questions about age at time of interview, age of first use of

hookah, occupation, location, ethnicity, marital status and current or past use of hookah. Interviews were based on topic guides, including a series of broad interview questions which the researcher considered to explore and probe with the interviewee.

Interviews were conducted in Persian and translated into English by an accredited institution. They were recorded and took from twenty minutes to one hour and a half. All interviews were audio-taped and transcribed verbatim with participants' permission and then coded through conventional content analysis method. Then we analyzed the transcripts by identifying emergent themes using constant comparison of the interview transcripts. Data generation and analysis continued until no new themes or ideas were emerging. The final coding scheme consisted of 4 themes and 20 sub-themes. Code management was done with the help of MAXQDA-10. Credibility and conformability was enhanced through member checking (in this case, the transcripts and codes extracted from the interviews were returned to several interviewees to verify their authenticity), and validation of emerging codes and categories in subsequent interviews, and also debriefing with two supervisors.

Results

From 36 women who participated in our study, 32 participants were current use of hookah and 4 participants were former user of hookah. The age of participants ranged from 15 to 51 years old, with a median age of 24 yrs. Age at onset of smoking hookah ranged from 7 to 42 years, with a median age of 25 yrs. The characteristics of participants are presented in Table 1.

Participants identified the categories of *Positive attitude toward hookah smoking*; *Social and family facilitators*; *Psychosocial needs and gaps* and *Sensory characteristic of hookah*. This manuscript includes some main categories and sub-categories of two themes. To further illustrate categories, we include quotes from the interviews.

Table 1: Demographic Characteristics of Sample

	n(%)
Age of participant	
15-25 yr.	11 (30)
26-35 yr.	13(36)
36-45 yr.	6(16)
46-55 yr.	4(12)
56-65 yr.	2(6)
Age of initiation	
5-15 yr.	6(17)
16-25 yr.	19(52)
26-35 yr.	6(17)
36-45 yr.	4(11)
46-55 yr.	1(3)
Ethnicity	
Fars	24(67)
Tork	4(10)
Lor	6(17)
Kord	2(6)
Marital status	
Single	15(42)
Married	15(42)
Divorced	5(14)
Widow	1(2)
Occupation status	
Employed	17(47)
Unemployed	19(53)
Education	
Academic	16(44)
Diploma	12(33)
High-school	6(17)
Elementary	2(6)
Residence	
North of Tehran	2(5/6)
South of Tehran	4(11/1)
West of Tehran	11(31)
East of Tehran	16(44)
Center of Tehran	3(8/3)

Positive attitude toward hookah smoking

• *Socio-cultural acceptance of hookah*

One of the fundamental reasons for women to begin smoking hookah is the formation of a positive attitude in them as a result of people's positive attitudes to hookah compared to cigarettes. Women believed that people, as well as their parents, think cigarette smoking is bad for a woman,

but they have a more positive view about hookah and as a result women can smoke hookah in the community or in the presence of their family members: People look down on a cigarette smoking woman, but it's not the same for a woman who smokes hookah. (P: 33).

- ***Common misconceptions***

In addition to the role of greater social acceptance of the hookah to the cigarette, supposing that the hookah is healthier compared to cigarettes also has a role in women's inclination toward smoking hookah: Cigarette smokers do not usually smoke hookah, conversely hookah users are not usually cigarette smokers as the level of nicotine in them is very different. The nicotine in hookah when combined with water becomes a little weaker (P: 31).

- ***Unexpected consequences***

One of the factors leading positive attitude of women toward hookah is the experience to deal with people who smoke hookah every day but when it was necessary they could quit using hookah. This leads to the perception in women that hookah does not cause dependence: My mother used to be an avid hookah smoker, especially when she was pregnant with my younger sister. Everybody told her the child would be addicted. My mom used to smoke hookah quite often, then suddenly she quit (P: 26). I've seen very few people around me really addicted to smoking hookah. Most of them smoke hookah just for fun. Cigarettes are more addictive (P: 14).

When people talk about these experiences to each other and the experiences are transferred from person to person, it results in a positive view of community to the hookah.

- ***Normalization of hookah use***

Participants of this study believed that observing the prevalence of hookah use outside or inside the home is effective on normalization of hookah use. Today, in many entertainment places, traditional restaurants and coffee houses, hookah is available to everyone, whether woman or man. Also, in

some Iranian families, hookah smoking is common in the family environment, along with family members or family gatherings. In some families, girls witness hookah smoking in their families from their childhood, as hookah use is a tradition in their family and not merely a fashionable entertainment: Ordering hookah is very ordinary everywhere. I mean, when you order some tea, there is a hookah as well. Everybody takes both, hookah and tea. I mean when you take a seat, you're immediately asked: "what kind of tobacco you prefer?".(P: 30). Generally, I have never felt bad about hookah or never thought hookah smoking is bad. We smoke hookah when we're among young relatives, girls and boys both (P: 16).

- ***A traditional, popular and enlivening fashion***

According to participants, another factor effective on having a positive view about hookah in Iranian women is that hookah is a tradition that has its roots in Iranian culture. In the past, adult women smoked hookah exclusively at parties or in the mourning ceremonies. But now, the hookah has become a device for elation and reception of young guests. Especially when youth gather, hookah smoking is a means of entertainment in their nightly and friendly parties. However, what makes modern women consider hookah smoking an acceptable and justified act is that it is rooted in the ancient traditions of Iranian women and men: I think people use hookah because they consider it something traditional. Everybody knows it as tradition (P: 6).

According to participants, the attractiveness of hookah use in Iran is not only due to the joy of hookah smoking, but more for being with their friends and having fun with them. This is why hookah users usually do not enjoy hookah smoking in solitude. Hookah is a hobby which shows its nature in gatherings. According to participants' view, hookah makes people spend more time together and talk more with each other: I think if there isn't a hookah, everyone will go back home very early because after having dinner and fruit, there's no more to say. But hookah increases the

intimacy, as people start to talk while passing it to others (P: 22).

Hookah smoking causes people feel happy and euphoria. This feelings is not only due to hookah smoking but also because hookah smoking necessitates people to sit next to one another, as each person puffs on the hookah several times and passes it to the person next to them. In this way, the hookah goes around the people several and several times. Sometimes, they compete with one another for taking the hookah. They begin to joke with one another and stay together until the hookah is there. The collective happiness resulted from the interaction between people and hookah encourages other people who have never smoked hookah to try it because the happiness makes them think that hookah is socially desirable, and they can smoke it if other people do so. Furthermore, trying hookah can lead them to apparently happy friendly gatherings. When naïve people enter these intimate gatherings, where the atmosphere is filled with thick smoke, tobacco smell, laughter and joy, they are encouraged to try hookah. In fact, here a motivating factor for smoking hookah is "the power of the group" that goes beyond individual persuasion or influence of hookah users. Hookah smoking is a choice influenced by "group" but the previous background of individuals or their subjective beliefs and attitudes are added to the strength of the group power: I saw everybody was smoking hookah, so I smoked too. And now it's a fashion (P: 34).

When you're in a hookah smoking place, you'll smoke as well (P: 33).

Social and family facilitators

• *The role of friends and peers*

Ten participants of this study who were young and single stated they smoked hookah for the first time with one of their friends (girl or boy, or groups of boys and girls) in a traditional restaurant. Friendship with hookah users provides potential conditions for starting hookah smoking even if one delays it for some time. Having hookah user friends gradually makes the person think that:

"There must be a good thing in hookah that people are going to smoke it, otherwise, these people are not insane to smoke hookah". People who smoke hookah outside home with their friends for the first time may have no family background in this regard: I think the first time I went out with my school mates was after I was admitted to university. We were 5 friends. One of my friends suggested we smoke hookah now that we're together. It's OK. In my family, however, no one smokes hookah (P: 2).

Another participant who claimed her friends were the major reason she started smoking hookah, replied to the question "if you didn't have hookah user friends, would you smoke hookah?" as follows: No, because nobody in our house smokes hookah or cigarettes. If I were to ask my father to accompany me in smoking hookah, he would tell me: "Get away from the front of my eyes". (P: 13). Some girls may have already become familiar with hookah in the family, but they have not been able to try it in the family for some reasons and thus they use the opportunity of being with friends in traditional restaurants to do so: The first time I started smoking hookah was in a traditional restaurant with my friend. My father and my brother smoke hookah at home, I always wanted to try it but I wasn't allowed to. So that was my opportunity to try it there (P: 25).

Some participants emphasized the role of opposite-sex friend when it comes to the youth starting hookah smoking: The role of my friends is more important. Usually the opposite-sex friends have a role in this regard. Boys and girls encourage each other to smoke hookah (P: 16). Half the effect comes from the boyfriend. At first, they all go to a traditional restaurant and smoke hookah instead of going to a coffee shop. When you go there, you see everyone is smoking hookah and the boyfriend is a hookah user, so you want to smoke hookah as well (P: 36).

• *The mutual role of government and people*

Participants believed that one of the factors in the prevalence of hookah use among women is the development of hookah lounges in recent years.

These lounges advertise hookah easily and these advertisements are effective in attracting women: Every time I go to Fasham or Farahzad (Two traditional entertainment center in Tehran), I see all restaurants have hookah photos and the word "hookah" is seen along with the tea and barbecue which is a strong advertisement for hookah (P: 1). In addition to special lounges providing hookah like traditional restaurants and coffee houses, other service providers such as photo shops may also provide hookah for people in order to attract customers: We went to a photo shop to have our wedding photos taken, and there was a hookah prepared for us. So we first smoked hookah and then had our photos taken (P: 10).

Participants believed that the most important reason for the development of these lounges is government's inconsistent and passive control, or the instability of governmental laws and regulations to control hookah use. For example, in the past, hookah was forbidden for single people or women based on the public laws, but at present, these laws are not considered in such centers: It has been said that it is going to be forbidden, but it hasn't been done yet. Even today I heard on the radio again that they're supposed to deal with it, but slowly, gradually. However, I don't think it could be stopped (P: 2).

- **Affordability and availability of hookah**

One of the conditions that has led to the prevalence of hookah use is the facilitation of its use and the fact that it is available everywhere; from homes to restaurants, traditional restaurants, shopping centers, as well as open and closed entertainment areas. Hookah users usually prefer to smoke hookah in traditional restaurants and open spaces instead of inside the home. Although they usually have a hookah at home so that they can use it whenever they desire, and they can carry it with themselves when they go to their relatives' homes or when they travel, as there is no clear cultural constraints or legal prohibition for hookah use inside or outside the home at present: It can't be stopped because it's available everywhere (P: 23). Well, now hookah has become very fash-

ionable, it's seen everywhere, coffee shops, wedding ceremonies (P: 20). The good point about the hookah is that it's available. It's an available entertainment (P: 7).

One of the reasons for the prevalence of hookah use among youth, especially young women is that it is a cheap hobby. When these people go out with their friends to have fun, one of the criteria for choosing group entertainment is that the hobby is cheap and affordable. Hookah provides this possibility for them. They could split the cost of the hookah and order one because the price of a hookah is much more appropriate than other hobbies such as going to a restaurant to have lunch or dinner: Well, when girls and boys gather, they should do something, so they drink some tea, smoke hookah, that's all. If they want to order a meal, they have to pay much more. But in these gatherings, the price of hookah and the tea is more appropriate (P: 30). There are different prices for hookah and if someone wants to smoke hookah at home, he could buy an affordable hookah and keep it at home. Tobacco is usually affordable, too: Each tobacco pack is 50 cents and can be used four times (P: 1).

Friends, especially male-friends are effective in this regard, as the boys usually pay the cost of the hookah. If girls want to have fun alone or enjoy their favorite hobbies, they themselves have to pay money. But hookah is a hobby that they can enjoy with others and share the cost with each other or the total cost can be paid by friends: We go with our friends' boy-friends. They pay; you don't pay out of your pocket (P: 17).

- **The role of social changes**

- ❖ *The entry of women into the labor market*

According to participants, the entry of women into the labor market has provided conditions for women to enjoy hobbies such as smoking hookah. Hookah is a means for having fun and spending time. Now that women, like men, have different job positions and participate in social activities, they are financially more independent and enjoy spending time with their friends and colleagues for refreshment between working hours and one of the most available entertainments for employed

women is smoking hookah. In fact, the entry of women into the labor market has led to an acceptable financial capability as well as the development of their friendship network and these factors have been effective for women to participate in social entertainment. Smoking hookah is considered an entertainment that employed women can enjoy at any time between working hours and can afford easily: In my workplace, we are 5-6 women. All of us smoke hookah. We are about the same age. Usually when our work is over, someone suggests smoking hookah together. I had a friend who had a car and almost every Thursday she would suggest we go smoke hookah and then go home” (P: 20). As far as I can remember, when I come out from the company at 6 PM, I go to a traditional restaurant for there’s not another entertainment (P:33).

❖ *Late marriage, stay single for a long time*

The single participants of the study stated one of the underlying reasons for beginning hookah use is that girls stay single. They believed that staying single creates a feeling of emotional vacuum and also, they have more free time. As a result, they spend more time with their friends or they enter friendly gatherings where boys and young men are present as well. As hookah is usually one of the hobbies of such friendly gatherings, they also learn to smoke hookah in such gatherings: Because singles have more free times and they'd like to spend more time with their friends (P:33).

Hookah smoking is more common among the single women than married ones. Well, it’s a hobby, you know, a married person is engaged in her life. Single people, either student or employed, have relationships with their peers (P:20). I think the late marriage of girls in this time is also very effective. The one who gets married sooner, perhaps out of fear of her husband or that may be she isn’t allowed to work or perhaps out of shame is less likely to use hookah(P:17).

Discussion

This study was conducted to discover reasons of initiating hookah smoking using women’s experiences. It is obvious that the discovery and report

of hookah smoking reasons in women will contribute to determine health promotion interventions and design educational and prevention programs.

In this study, one important reason of hookah smoking initiation in Iranian women was its perceived socio-cultural acceptance. This acceptance rooted in the beliefs and attitudes transmitted to girls and women through family, friends, and the social surrounding. For instance, participants believed that Iranian people agreed more with hookah than cigarette for women. Moreover, there was a misinterpretation that hookah was less hazardous than cigarette because its smoke passed through the water. These beliefs are contrary to the evidence showing that various compounds in hookah smoke can cause cancers, including lung cancer, and heart disease (13).

Besides what girls and women hear from others about benefits of hookah, their personal experiences are also influential in their positive attitude toward hookah. For instance, they get a positive perception of hookah and find it common and safe when they see that their popular or significant family members smoke hookah, or when they see youths and women smoking hookah in parties, family gatherings, traditional restaurants, or recreation centers. In this regard, the participants expressed that hookah “seemed ordinary” and “was not obscene any longer.” Furthermore, according to the participants, one important factor underlying the initiation of smoking hookah in women was that women know that hookah was commonly used in Iran in special ceremonies since past times, and it developed again as a means of joy and welcoming guests in friendly or family gatherings. Moreover, the participants explained that Iranian families do not deprecate hookah due to its cultural origin, as they can smoke it before their older family members, while smoking cigarette is considered disrespectful, and the society does not think good about women smoking cigarette. Hookah smoking causes people feel happy and friendly together, stay more together, laugh, joke, and enjoy being together. In a qualitative study conducted in some Moslem countries of the Eastern Mediterranean Region, one of the themes

which emerged was the negative image of women smoking waterpipes especially in Lebanon, where traditional gender roles depict women smoking waterpipes as disrespectful to society because of a sexual allure conveyed through waterpipe smoking (14). However, in our study, there was no reference to sexual allure of hookah smoking and hookah smoking has been described only as a mass entertainment, in family and friendly gatherings.

In studies done in eastern and western countries, one cause of youths' willingness to smoke hookah is their subjective norm that hookah is socially acceptable (6,15,16). Moreover, Roskin and Aveyard, similar to our study, reported that the social background, that is, the cultural and ethnical background, influenced initiating hookah smoking. However, they, unlike the present study, reported that social acceptability of hookah is contributed to its continuation (17). A study conducted to compare experiences and attitudes of cigarette and hookah smokers in Syria reported results similar to our study (18).

Based on the present study, an important reason of initiating hookah smoking in women was their friends; either friends visiting them out of home, or family friends. Sometimes, girls and women see their family members smoking hookah, but they are not allowed to do so. In this respect, friendship with people smoking hookah provides favorable conditions for women to begin smoking hookah. In this case, friends facilitate hookah smoking. Sometimes, there is no family-related background, and girls initiate smoking hookah by their friends' encouragement, and in this case, friends play as a strong initial stimulus. In a qualitative study all participants stated that they tried smoking hookah under the peer pressure (19), which has been also reported in other studies (20-24). According to the participants, male friends were particularly influential as a facilitator or stimulus in smoking hookah. It is common among today youths to meet each other in traditional restaurants, and boys order hookah for girls, so that, girls who do not smoke hookah begin smoking it following their friendship with boys smoking hookah. Some reasons of hookah smoking, found

in the present study, are similar to with those of cigarette smoking. As the study conducted by Kin and Lim showed that some girls began smoking cigarette under the influence of their male friends. Girls smoked with boys to show that they could do everything boys could do, so they smoke cigarette to be accepted (25).

The participants of the present study explained that some factors increased hookah smoking in women, including the spread of hookah over the society, the government's failure to restrict the distribution of hookah, and its availability for both men and women. Some studies also introduced the increased number of cafes serving hookah as stimuli for spread of hookah smoking (15, 26). The World Health Organization emphasized on controlling tobacco, including hookah, through Framework Convention on Tobacco Control (FCTC) treaty and Tob Reg's advisory note. Although many countries approved to implement contents of the treaty, the contents have not been implemented properly so far; and ambiguous, unstable, and flexible rules about smoking hookah have resulted in easy provision of hookah in the society and the assumption that smoking hookah is not unsafe (2).

Iran also signed the FCTC treaty in 2003. Based on national surveys, the alarming increase in adolescents', especially girls' tendency to smoke hookah necessitates stricter control of general health and promotion of rules and regulations (24). In different countries all over the world (United States, Europe, and Asia), the low cost of hookah and easy access to it have been among factors influencing hookah smoking (2,27-31). Tobacco has been highly used as a social norm in places tobacco was accessible (32). In an Iranian study, the most common places the girls had tried hookah was traditional tearooms and, then, family gatherings. This has been common that several smokers shared one hookah with one another (4), and the shared hookah meant that its cost would be shared, too (30).

In the present study, women's entry to the job market and the subsequent financial independence were among predictors of beginning to smoke hookah. World Health Organization attributed the

increased tobacco use in women to the weakening of the social, cultural, and political constraints, and women's empowerment (12). Some researchers also introduced changes in culture and traditions and women's financial freedoms as reasons for increased use of tobacco in women (33). Furthermore, a new result in the present study was that increased age of marriage and long period of singlehood could increase girls' tendency to smoke hookah. Single girls spend more time with their friends, and consequently, they are more likely to smoke hookah in their friendly gatherings.

Study Limitations

One important result of this study was that it was difficult to separate reasons of initiating hookah smoking in one woman or in different women according their different demographic specifications because the reasons highly overlapped with one another, and sometimes, one reason was hidden inside another reason. Moreover, it was difficult to separate initiation reasons from continuation reasons of hookah smoking. Although these difficulties could limit the study, the researcher tried to control the limitation through devoting more time to study and interview with as many participants as possible. The generalizability of the study may be limited, because the interviews have been conducted with women who introduced to investigators and agreed to participate in the study, and these participants may not be representative of all women who smoke hookah. Because of the cultural sensitivity of research issues, as some participants may express only desirable social experiences and avoid expressing their real experiences. Moreover, all participants of the study were from Tehran and the experiences of Tehrani women may not be generalized to women from other cities in Iran or other countries.

Conclusion

Based on the results of this study, one of the major causes of increased hookah smoking may be its ordinary use. Thus, all factors causing the ordinary

use should be eliminated, and efforts should be made in opposition to hookah smoking promotions, such as providing true information about the nature and harms of hookah, especially through media and educational books; restricting hookah smoking in the society; limiting it to private places, not public places, homes, and recreation centers, in order to reduce its exposure to people who do not smoke hookah; and replacing hookah smoking with traditional and safe entertainments through public recreation centers. These are fundamental strategies for reducing hookah smoking.

Ethical considerations

Tehran university of medical sciences of ethics committee approved the study protocol and all women was informed about the purpose of the study; what was involved in participating; confidentiality and anonymity issues; and, the right to withdraw at any time without repercussions. Following their approval to participate the interview, their consent, verbal or written, to record the interview was obtained.

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