



Study of Effective Factors in the Tendency of Young People to Smoke Hookah in Teahouses in Deprived Areas of Zahedan in 2018 - 2019

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Abstract

Background: Given the increasing trend of hookah use among youth in deprived areas and the increasing number of traditional teahouses serving hookahs, it is critical to investigate the reasons for this issue.

Objectives: The aim was to determine the factors affecting the tendency to use hookahs.

Methods: This study was conducted in Zahedan City, the capital of Sistan and Baluchestan Province. The sampling method in this study was cluster sampling, such that among 15 traditional teahouses, 4 teahouses were randomly chosen. After referring to each of these teahouses, 1385 questionnaire forms were distributed among all youth, and 300 questionnaire forms were returned. The structured questionnaire consisted of a series of questions about demographic data, favorite flavor, duration of using a hookah, the main reason for hookah smoking, etc. The analysis of the data involved both descriptive and inferential statistics, including mean, SD, and linear regression. The obtained data were analyzed using SPSS version 23.

Results: The results of linear regression showed that the duration of smoking ($B = 0.30$; 95% CI, 0.22-0.37) and reason for smoking were significantly associated with the rate of hookah smoking ($B = 0/56$; 95% CI, 0.45 - 0.68).

Conclusions: As a result, there is a strong association between smoking duration and the atmosphere of traditional teahouses with the rate of hookah smoking. Thus, other places with a healthy atmosphere (such as gyms and sports clubs) should be made for youths to spend their time.

Keywords: Smoking, Hookah, Motivation

1. Background

Tobacco use is considered among the major causes of death globally. Although, according to the statistics, the cigarette smoking rate has decreased significantly in developed countries in the last 40 years, the use of other forms of tobacco products has increased (1). The majority of smokers are looking for safer and more acceptable tobacco forms (2). Nowadays, hookah smoking is becoming increasingly common among youth and is considered a safe alternative to cigarettes (3). A hookah is a means of smoking flavored tobacco. The hookah originates from Middle East countries (including India and Pakistan), and the beginning of smoking goes back to the 15th century. According to the latest estimates, hundreds of millions of people smoke hookah daily all around the world (4).

Hookah use is considered another form of smoking tobacco (5). The health risks of the smoking hookah are even more than smoking cigarettes since the amount of tobacco used in a 45-minute hookah session is equivalent

to 100 sticks of cigarettes. Evidence shows that young people aged 15 to 24 years old, compared to other people, have a greater tendency toward smoking hookah (6). Hookah smokers are at risk of different kinds of pathogenic bacteria (7). Investigating motivations of hookah smoking has shown that 25% of people smoke hookahs just because it is available at different ceremonies, and the other 25% believe that hookah smoking aids them to feel relaxed (8).

The motivation of hookah smokers can play an important role in their tendency toward hookah smoking (9). Many people mistakenly assume that it is not very harmful because, during smoking, the smoke passes through water (1, 10, 11). In fact, several factors contribute to the increasing tendency of youth toward hookah smoking, such as availability, different flavors, dense smoke, attractive pipe design, low price of tobacco, social acceptance, and the misconception that smoking hookah is less harmful than smoking cigarettes (12). In a study conducted to investigate drug abuse among high school students in southeastern

Iran, the results demonstrated that 21.5% of students used hookahs (13). Given that hookah smoking is a growing phenomenon, especially among youth and students, and since many hookah smokers believe that the hookah is a safe alternative to other tobacco products (14), examining the factors affecting the tendency toward hookah use is of significant importance (15).

Barnett et al found that relaxation and social experience were the main reasons for hookah smoking; moreover, the dangers of hookah smoking were misunderstood by the participants (16). Sabzmakan et al assessed hookah smoking among Iranian women and figured out that positive perspective, social pressure, and false beliefs about hookah smoking pushed them to smoke (17). Mohammad-poorasl et al found that the obscenity of hookah smoking is less than cigarettes, and because of this, adults prefer to smoke hookah (18).

Although hookah smoking has many consequences on health, the consumption and popularity of hookahs among young adults continue to increase in Iran. In Zahedan (located in southeastern Iran), the rate of hookah smoking has increased dramatically, and, in the majority of main streets, many traditional luxurious teahouses have been established. Deprived areas lack amenities (such as public or private entertainment facilities) and high-quality education. Therefore, the present study aimed to determine the factors affecting the tendency to use hookahs.

2. Methods

This descriptive and correlational study was conducted in Zahedan City, the capital of Sistan and Baluchestan Province. In 2018 - 2019, the researcher started to collect data from the managers of some teahouses on how many customers they have every day. On average, 95 ± 5 individuals regularly referred to the 15 traditional teahouses, which were located in district 2 of Zahedan. Eventually, the author considered that 1385 youth constantly referred to the teahouses. The Cochran formula with a margin error of 0.05 was used to determine the sample size. The sampling method in this study was cluster sampling, such that among 15 traditional teahouses, 4 teahouses were randomly chosen. After referring to each of these teahouses, 1385 questionnaire forms were distributed among all youth, and 300 questionnaire forms were returned after 1 month.

All participants were assured that the obtained data would remain confidential and that if a person was unwilling to participate in this study, he/she would be eliminated, and someone else, among regular hookah smokers, would be replaced. However, 10 participants did complete

the questionnaire forms and were replaced by other participants. The analysis of the data involved both descriptive and inferential statistics, including mean, SD, and linear regression. As the majority of participants were male, so the population of the research was considered to be male. Inclusion criteria were as follows: (1) having at least 15 years old and participating in the study voluntarily and (2) having experience of hookah smoking. Exclusion criteria were as follows: (1) refusing to cooperate in the study, (2) being diagnosed with psychosis or neurosis, and (3) having a history of cognitive therapy. Reliability analysis was carried out, and the Cronbach α showed that the reliability of the questionnaire was acceptable ($\alpha = 0.78$), and the validity of the questionnaire was accepted by experts.

2.1. Survey Development

The structured questionnaire consisted of a series of questions about (1) demographic data, (2) favorite flavor and use of other substances (cigarettes, alcohol, and pan), (3) duration of using a hookah (1 = 1 year, 2 = 2 years, 3 = 3 years, and 4 = 4 years and more), (4) the main reason for hookah smoking (having fun, being with friends, feel relaxed, and a safe alternative to cigarettes), and (5) the number of referring to the teahouse (1 = once a week, 2 = twice a week, 3 = 3 times a week, and 4 = 4 times a week and more). These questions were designed based on the feedback provided by specialists, and previous surveys on hookah smoking were reviewed (6, 15, 19). The validity of this questionnaire was obtained 0.78 using the Cronbach α coefficient. The obtained data were analyzed using SPSS version 23 (SPSS Inc, Chicago, Ill, USA). The descriptive findings included mean, frequency, and percentage.

3. Results

A total of 300 male subjects smoking hookahs in traditional teahouses with the mean age of 23 ± 6 years participated in this study (Table 1).

Linear regression showed that the duration of smoking ($B = 0/30$, 95% CI, 0.22 - 0.37) and reason for smoking were significantly associated with the rate of hookah smoking ($B = 0/56$, 95% CI, 0.45 - 0.68), see Table 2.

4. Discussion

The results of the present research indicated that the duration of smoking hookah and positive beliefs (such as having fun, being with friends, feeling relaxed, and a safe alternative to cigarettes) are predictors of smoking hookah among adults in Zahedan. Some participants have

Table 1. Demographic Information of Hookah Smokers

Variables	No. (%)
Age (y)	
15 - 20	91 (30.3)
21 - 25	163 (54.3)
26 - 30	34 (11.3)
36 - 40	6 (2.0)
46 - 50	6 (2.0)
Level of education	
Diploma	51 (17.1)
Undergraduate students	65 (21.6)
Bachelor	184 (61.3)

been going to traditional teahouses for over 4 years, showing that it is difficult for them to quit smoking hookah and leave that friendly atmosphere. The results of this research support the findings of other researches that social experience (16, 20), positive attitude (17), feeling relaxed (8), leisure time (21, 22), and difficulty to quit (23) are the main reasons for pushing adults to hookah smoking. Ansari et al., in a study conducted in Sistan and Baluchestan Province, found that 53% of these people smoked hookahs in groups, and 12.6% of hookah smokers used it every other day (24). In a similar study conducted in India (22), the results showed that the age of onset of hookah use was 15.7 years old, 38.2% of hookah smokers used it once, 47.4% of adolescents smoked hookahs more than once a month, 14.4% of adolescents smoked hookahs once a week, 63.2% of hookah smokers reported that they started using hookahs with their friends, 22.4% of them started using hookahs with their siblings, and 14.5% of them started using hookahs with their relatives.

According to the latest statistics provided in a meta-analysis (25), the hookah smoking rate was about 23.1% in Iran. In the north, northwest, center, and southeast of Iran, this rate was respectively 13.9%, 10.4%, 28.7%, and 27.5%. In this regard, northern Iran had the highest rate of using cigarettes and hookahs. Although drug abuse has had a stable and/or even decreasing trend in developed countries, the rate of drug abuse is increasing in developing countries. Iran's geographical position is in a way that it is considered the primary route for drug trafficking from Afghanistan to Europe. Therefore, the location provides a proper ground for easier access to drugs for youth (25). Being available could be another reason to increase the rate of smoking hookah because, in several main streets of Zahedan, many traditional teahouses are located, and without any limitations, individuals walk there.

4.1. Conclusions

As a result, there is a strong association between smoking duration and the atmosphere of traditional teahouses with the rate of hookah smoking in deprived areas. It is recommended to combat this phenomenon as follows: (1) students be educated about the harmful consequences of long-term consumption of hookah smoking, (2) gyms and sports clubs should be advertised to attract adults to be with each other, (3) imposing an age limit, (4) not allowing to establish more traditional teahouses in cities, (5) put some banners on the walls of teahouses about consequences of smoking could be beneficial, and (6) considering workforce in deprived areas is so important because the majority of youths smoking hookah are unemployed, and if the government creates job opportunities for them, the rate of smoking will decrease.

4.2. Limitations

Among the limitations of the current study, the following can be mentioned. Since different numbers of people referred daily to the traditional teahouses to use hookahs, accessing the accurate number of referred people and hookah smokers was nearly impossible.

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Footnotes

Authors' Contribution: Khaled Badpa conceived, designed, interpreted, and revised the manuscript, as well as performed the statistical analysis. Mohammad Ali Fardin collected the data and drafted the manuscript.

Conflict of Interests: The author reports no conflicts of interest in this work.

Ethical Approval: This study was approved by the Research Committee of Islamic Azad University Zahedan Branch. All ethical principles were considered in the present article.

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Informed Consent: The participants were informed about the purpose of the research, and they were assured of the confidentiality of their personal information. Moreover, they were allowed to leave the study whenever they wanted, and if desired, the results of the research would be available to them.

Table 2. Association Between the Duration of Smoking and Reason for Smoking with the Rate of Hookah Smoking (N = 300)^a

Variables	No. (%)	Hookah Smoking Rate		
		R-squared (R ²)	Adjusted R-squared	B (95% CI)
How long have you smoked hookahs?		0/165	0/163	0/30** (0/22 to 0/37)
Less than 1 year	128 (42.7)			
1 - 2 year/years	57 (19.0)			
3 - 4 years	24 (8.0)			
4 - 5 years	33 (11.0)			
Over 5 years	58 (19.3)			
Reason for Smoking		0/231	0/228	0/56** (0/45 to 0/68)
Having fun	145 (48.3)			
Being with friends	88 (29.3)			
Feel relaxed	61 (20.3)			
A safe alternative to cigarettes	6 (2.0)			

^a * P < 0.05; ** P < 0.01; *** P < 0.001

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