Student’s Positive and Negative Attitudes Towards the Hookah Tobacco Smoking

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Abstract: The prevalence of hookah tobacco smoking among young people is increasing. This study sought to determine the positive and negative attitudes toward hookah tobacco smoking among university students. Overall, 320 male students residing in dormitory of Ilam University of Medical Sciences participated in this cross-sectional study. Data were collected by a researcher-made 37-items questionnaire and were analyzed using SPSS Version 19. Obtained Mean±SD for study subject’s positive and negative attitudes toward HTS was 66.12±12.34 and 41.49±6.77, respectively. Also, results indicated that the students with previous history of HTS had more positive attitudes toward HTS while students without such history reported more negative attitudes (p<0.001). It is suggested that health promotion interventions in the future should be more focus on reducing positive attitudes and increasing the negative attitudes of university students toward hookah tobacco smoking.

Key words: Attitude, Hookah Tobacco Smoking (HTS), university students, ilam, young people youth

INTRODUCTION

Tobacco smoking is the most common and preventable cause of mortality (Hinrichs et al., 2011) which is considered as a public health problem throughout the world (Barnett et al., 2013; Goenka et al., 2010). Hookah is an old and traditional way for smoking tobacco and is known with different names in different regions such as shisha, nargileh or water-pipe (Bahtouee et al., 2007; Heatherton et al., 1991). Hookah Tobacco Smoking (HTS) is associated with critical problems including lung cancer, cardiovascular diseases, respiratory diseases, infectious diseases such as Tuberculosis, weak performance of memory and addiction to nicotine (Primack et al., 2009). Additionally, it might result in some other problems such as low birth weight, bronchial cancer and atherosclerosis. On the other hand, quitting it might be associated with signs of quitting such as depression and anxiety (Stewart and Moreno, 2013). Consumers of hookah tobacco believe that it has less addictive effects and is less harmful than cigarette; however, the compounds in hookah tobacco’s smoke contain large amounts of carcinogens, heavy metals and high levels of nicotine and carbon monoxide (Eisenberg and Shihadeh, 2009). Blood nicotine level of the individuals who smoke hookah tobacco every day is equal to that of those who smoke 10 cigarettes daily (Neergaard et al., 2007). In a 1 h session of hookah smoking, smokers inhale about 90000 mL of smoke which is considerably higher than cigarette smoke (Cobb et al., 2010). A session of HTS including nearly 200 puffs of smoke exposes the smokers to 3-6 time higher levels of carbon monoxide that is 46 time more than that of a single cigarette (Barnett et al., 2011).

Although, hookah has been very popular among Middle East countries, studies have shown that prevalence of HTS is increasing, especially among the youths, in other countries such as USA, Canada, Australia and the whole Europe. Increase of the number of Hookah Saloons (Hookah Gardens) indicates the increasing HTS around the world, for example, in USA, the number of hookah saloons has been increased by 400% in past 12 year (Maziak, 2011). In Iran, hookah was previously used by adults, mainly by men and in the southern regions; however, in recent years, smoking the tobacco material combined with flavors (molasses) has prevailed among families and youths alarmingly and considerably. Studies conducted in Iran have mostly reported prevalence of HTS among the youths as 20-30% (Bahtouee et al., 2007).

Prevalence of HTS among university students has been grown extensively in recent years (Smith-Simone et al., 2008). Studies have shown that various factors, including availability, low cost and most importantly different attitudes and beliefs on the less disadvantages of HTS compared to cigarette, play effective role in prevalence of HTS (Martinasek et al., 2011). Researches indicate that university students view
HTS to be less addictive than cigarettes (Jawad and Power, 2016) and also believe it to be a highly socially acceptable form of tobacco use (Smit-Simonne et al., 2008).

It seems necessary to recognize these attitudes in order to accomplish exact needs-assessment and design effective health promotion interventions. Thus, the purpose of this study was conducted on male students residing in dormitory of Ilam University of Medical Sciences to investigating their positive and negative attitudes toward HTS.

MATERIALS AND METHODS

A total of 320 male students residing in dormitory of Ilam University of Medical Sciences in 2015-16 school-years were selected through convenient sampling method for this cross-sectional study. Data were collected using a researcher-made 37-items questionnaire. The questionnaire includes three sections: socio-demographic characteristics such as students age, grade, marital and employment status; duration of residence in dormitory; family Socio-Economic Status (SES) and Hookah Tobacco Smoking (HTS) history. The 18 items assess the positive attitudes of participants (e.g., hookah tobacco smoking lead to higher acceptability among friend groups) and 11 items for assessing the negative attitudes (e.g., hookah tobacco smoking can provide the individual’s tendency to addiction). Total score of attitude (The combination of positive and negative attitudes) was measured using a 5 point likert scale (1 = strongly disagree to 5 = strongly agree). It must be mentioned that acquiring the higher score in positive attitudes indicates worse (weaker) attitude and acquiring the higher score in negative attitudes indicates better (healthier) attitude of the study subjects toward HTS.

Validity of the questionnaire was approved by experts, including 8 experts of health and promotion. Furthermore internal consistency of the questionnaire was measured through calculation of Cronbach’s alpha coefficient which was calculated as 91% (α = 0.91) and 83% (α = 0.83) for the positive and negative attitudes, respectively. The subjects completed the questionnaire through self-reporting method and the average time required for answering the questions was 25 min. Participation of the students in the study occurred after their full agreement and informed consensus. The present study was approved by Research Ethics Committee of Ilam University of Medical Sciences (IUMS). Descriptive tests, independent t-test and one-way Analysis of Variance (ANOVA) calculated using SPSS 19. The p<0.05 were considered to be statistically significant.

RESULTS AND DISCUSSION

A total of 320 university students ranging in age from 18-35 years (M±SD = 23.03±4.61) were studied. Most of the participants were single (90%) and unemployed (87.5%). Mean and standard deviation of study subject’s total attitudes toward Hookah Tobacco Smoking (HTS) regarding socio-demographic characteristics presented in Table 1. In this Table 1, the mean score of the total attitude of the subjects is reported and higher score indicates better (healthier) attitude. As shown there was no significant difference between the student’s attitudes regarding marital status, job and dormitory residence duration (p>0.05); however, students with better socio-economic status had heal thier attitudes toward HTS (p<0.03). Furthermore, students of paramedical courses had healthier attitudes toward HTS compared to the students of other medical sciences, significantly (p<0.03).

Based on the findings of the present study, the mean scores obtained by the study subject’s positive and negative attitudes toward HTS was 66.12±12.54 and 41.49±6.77, respectively. Table 2 presents the mean,
scores and standard deviation of the student’s positive and negative attitudes toward HTS regarding previous history of hookah smoking. As seen in Table 2, 41.6% of the participants reported the previous HTS. Further, results indicated that the subjects with history of HTS had more positive attitudes toward HTS while students without such history reported more negative attitudes (p<0.001).

In the present study, the positive and negative attitudes of male students living in dormitories of Ilam University of Medical Sciences (IUMS) toward HTS were studied. The results indicate a moderate level of participant’s attitude to HTS so that, subjects obtained about 55% score of total attitudes (The combination of positive and negative attitudes). University students participated in this study that had the positive attitudes to HTS, believed to be less harmfulness, less addiction and higher social acceptance of HTS compared with cigarette. Students also believe that HTS increases the attractiveness, sense of fun and be confident. Study students also believed that HTS is way to have more friends, spend time, reduce stress and focus more on their homework. Similar to present study findings, in other studies HTS is often is stated as relaxing, pleasurable and fun (Carroll et al., 2012, Primack et al., 2008, 2012). Also, some other current researches indicating that hookah tobacco smokers report having been introduced to HTS by a friend and habitually participate in HTS with others (Braun et al., 2012). In addition, university students believe that HTS is less harmful than cigarette (Martinasek et al., 2011; Carroll et al., 2012; Braun et al., 2012). View that the HTS is filtered in the water looks to be one the main beliefs modifying the less damaging effects of hookahs (Aljarrah et al., 2009; Fielder et al., 2012). But it is well known that passing smoke through water does not change its substances and water will not filter the smoke (Eisenberg et al., 2008, Kiter et al., 2000). It seems that these false beliefs underlie the increasing trend of HTS in university students.

In other hand, students with negative attitudes towards HTS in this study believe that HTS is hazardous to health and cause negative view of people towards the hookah smokers. Also, they believe that a public perceive HTS as a worse behavior compared with cigarettes that reduce the popularity of the hookah smoker in the society. Also, the results of this study showed that students with previous HTS history had more positive attitudes to HTS and students without previous HTS history had more negative attitudes to HTS.

**CONCLUSION**

Similarly, in a study conducted by Martinasek et al. (2011) in South Florida, findings showed that positive attitudes toward HTS are the important factor in the youth’s tendency toward HTS (Martinasek et al., 2011). Also, Eisenberg et al. (2008) stated that individuals with experience of HTS in past 30 days had less belief in its disadvantages. It seems that there is reciprocal interaction between tend to HTS and its related beliefs. Although, previous HTS history resulted in positive attitudes to it; positive attitudes to HTS among university students increased odds of hookah use mutually while negative attitudes are related with decreased odds and intention to initiate HTS (Kandel, 2000; Smith-Simone et al., 2008; Noonan and Kulbok, 2012; Barnett et al., 2013). Unfortunately, the negative normative beliefs against cigarette smoking are not practical to HTS because of its mysterious, social and group nature (Aljarrah et al., 2009; Sidani et al., 2014). Therefore, many effective health promotion interventions that are perform to reduce cigarette smoking and the attitude modification in youth may not have the desired effects on reduce the HTS and its related attitudes. Thus, to altering the incorrect beliefs of university students about HTS, it is necessary to identify and address the origin causes of these misperceptions. For this purpose, further studies including cross-sectional and qualitative researches are needed to recognize factors affecting the tendency of youth toward HTS.

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**REFERENCES**


