

Effects of education on knowledge, attitude and practice of women about The harms of tobacco

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Abstract: Background: One of the problems facing today's world and severely threatens human health, is smoking. This study was conducted with on the aim of assessing the effects the harms of tobacco on education, knowledge, attitude and practice of women referred to health centers affiliated with Medical Sciences. Methods: In this semi experimental study 60 women referred to health care centers in Boushehr were assigned to three training groups using randomly sampling. Data gathering tools contained questions related to demographic information, knowledge and attitude. Data were analyzed utilizing SPSS/21. Results: According to the results, the majority of knowledge of subjects about the hazards of consumption tobacco, were the average level. 100% of subjects after intervention were about knowledge higher than 33.1. And their attitudes toward smoking hookah were 100% positive that after the intervention was reported for 5%. Based on a review of patient Practice status, these results showed that subjects' Practice on the consumption of tobacco, before the intervention, only 25% were favorable that after the intervention has been reported 73.7% at an optimum level. The Kolmogorov-Smirnov test of the results showed that the distribution of knowledge, attitude and Practice is normal. Conclusion: In this research due to the fact that the knowledge and attitude and Practice was average pre-training, But despite this still have to use hookah, The community is in dire need that by raising awareness people through films and booklets, to act training people. [Saideh MNJIRM 2016; 7(6): 79-84]

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Introduction: Nowadays, smoking is considered as one of the global health challenges and one of the death risk factors in developing and developed countries. Long-term addiction to drugs is the main behavioral reason of early death and disabilities.¹ The total share of Iran in smoking is 23.4% for men and 19% of women. Addiction to drugs is a known factor whose effects are effective on health and life quality of individuals.² Smoking has negative effects on the fetus in pregnant women, some women are informed of these risks and dangers and most of them try to leave it during pregnancy. All manner of using tobacco enter high nicotine to the blood of consumer.³ The most common methods of tobacco use in our country are hookah and cigarette. Consumers of hookah and their families are exposed to secondhand smoke and their families will also suffer to different kinds of cancers, cardiovascular diseases, respiratory problems and other adverse effects during pregnancy.⁴ The studies have shown that various factors are effective on prevalence of hookah consumption including different attitudes to less harmful of hookah than cigarette, availability, low cost and other factors.⁵ The best way to control smoking is prevention that can be done at three levels. For the purpose of prevention and treatment, increase of knowledge and information, a change of attitude, correction of false beliefs and educating certain skills is considered necessary and

beneficial measures.⁶ However, the required condition for any planning is to be informed of the current conditions and recognition of effective factors on drug abuse. It is clear that human behavior is a reflection of various factors and health training, as the center of activities and health programs requires recognition of behavior and its effective factors for change or modification of behaviors and replacing new behavior to make its programs effective.^{7,8} Although using hookah has been common among people from long times ago, nowadays, this undesired behavior has increased among youth especially young women in their homes, in recreational places and coffee shops.⁹ Since hookah using has increased in our country, especially in Boushehr that is near to Persian Gulf and the present study has been done with the aim of determining the effect of education on awareness, attitude and Practice of women referring to health care centers affiliated to medical sciences university of Boushehr concerning the harms of drug consumption.

Methods: The present study is semi-experimental simple random intervention where the effect of training hookah harms on awareness, attitude and Practice of women referring to health care centers affiliated with medical sciences university of Boushehr province has been studied. The population includes all women referring to consider health care centers who

have the experience of using Hookah either temporary or permanently. The sample volume has been estimated by consideration of reliability of 95% and a maximum error of estimation as 60 individuals. In this study, simple random sampling has been used and the studied samples have been selected using the available samples to achieve the required sample size. Then, concerning criterion of sample acceptation and sampling framework, the samples were selected through a drawing. Referring to the research setting, the researcher took action for filling the questionnaire before test. First, the researcher explained the objectives, methodology and the manner of completing the questionnaire to research units. Then, concerning the confidentiality of responses, the research units were insured; then, the researcher attended three days a week for 30-45 minutes for 8 weeks in medical centers and began training three 20-individual groups using training booklet, movie, slide and conservation. It worth noting that the phone number was given to research units to remove any question and answer so that they could ask their questions when necessary. Two months after intervention, the researcher attended the intended health care centers for reevaluation and the questionnaires were completed by cooperation of research centers. Those individuals are qualified to participate in the study who have active profiles in HafteTir and Kheibar health care centers affiliated to medical sciences university of Boushehr, have the experience of using hookah temporary or contemporary, are inclined to participate in study and are contest to participate in study and without mental, speech and auditory problems, have not participated in related training classes or researchers, do not use anti-depression drugs, have not cognition problem or medical education. Data collection includes 4 parts: first part includes demographic be used for 10 individuals having inclusion criterion which will be completed in two stages of 10 days distance by the research units, then the correlation between the results of two stages will be determined. One of the most known criteria for measuring reliability is the use of Cronbach Alpha; the closer value of alpha to 1 indicates high reliability that was used by Cronbach alpha of 0.79 and Kolmogorov t-test. It worth noting that finally these 10 samples were removed from the study. Data analysis has been performed using SPSS version 21. For development of tables, descriptive statistics were used, for data analysis; correlated t-test were used.

information including personal specification such as age, income, drug usage by family members etc. In second part, the questionnaire was related to awareness study that used researcher-made questionnaire according to framework of the present study and training booklet. Questions are about hookah consumption and its harms, infectious diseases due to hookah use, manner of prevention etc. that is according to five-point Likert scale including Agree, Completely agree, No idea, Disagree and completely disagree including 24 items. In this study, awareness means the total score obtained from research units from responding to researcher-made questionnaire that were measured before and after training in three levels of weak (score less than 16.4), average (score 16.4-33.1) and good (score above 33.1) according to three-point Likert scale and yes, no and I don't know questions. The third part of the questionnaire is related to attitude examination and the researcher, made a questionnaire is used which was in form of Agree, Completely agree, No idea, Disagree and completely disagree including 15 items. Total obtained score was classified according to attitude of study units in two levels of negative attitude (score less than 45) and positive attitude (score above 45) and measured according to Likert five-point scale by Agree, completely agree, Disagree, Completely disagree and no idea. At the end, the fourth part of questionnaire was related to Practice measurement where researcher-made questionnaire related to Practice was used including 8 items, the Practice was measured in two levels of undesired level (score less than 4) and desired level (score above 4) according to two-point Likert scale by yes and no question.

To ensure scientific reliability of questionnaire, retest was used such that the questionnaire will

Results: Most participants (55%) in this study are in the age group 20-29 years; 45% have education below diploma and just 5% has bachelor and higher education. 78.3% of subjects reported using hookah with their friends for the first time and 6.7% reported it with their parents. Most personal specifications of research units are presented in table 1. Concerning the results of determining the awareness level of subjects concerning hookah consumption before and after intervention in women, awareness of most (42%) subjects in respect to harms of using hookah has been at average level. The frequency of subjects' awareness of the harms of hookah consumption after

intervention indicates that 100% of subjects are in awareness level above 33.1. Moreover, mean awareness of subjects before intervention has been 24.72 that changed to 45.98 after intervention (table 2). Concerning table 3, the attitude of subjects toward hookah has been 100% a positive that after intervention, 5% of subjects had positive attitude toward hookah and 95% had a negative attitude. Moreover, the mean attitude of subjects before intervention has been 65.5 that changed to 31.15 after intervention that indicates the effect of education and training on attitude of subjects concerning hookah using. According to investigation of Practice of subjects toward hookah usage before and after intervention in women, it was shown that the Practice of subjects in using hookah has been just 25% desired before intervention that is reported 73.3% desired after intervention; moreover, mean Practice of subjects before intervention has been 2.72 that has changed to 5.13 after intervention (table 4).

The results of Kolmogorov-Smirnov test have shown that the dispersion distribution of scores of awareness, attitude and Practice is normal. Moreover, the comparison between subjects in terms of attitude, awareness and Practice before and after intervention proved that there is meaningful difference between mean awareness of subjects before and after intervention ($P < 0.001$ and $t = 23.21$); meaning that training hookah harms has been effective on awareness of subjects. Moreover, there is a meaningful difference between the mean attitude of subjects toward harms of hookah usage before and after intervention ($P < 0.001$ and $t = 28.98$) meaning that training hookah harm has been effective on attitude of subjects. There is a meaningful difference between Practice of subjects in respect to harms of hookah use before and after intervention ($P < 0.0001$ and $t = 8.16$); meaning that training harms of hookah use has been effective on Practice of subjects (table 5).

Table 1: Distribution of demographic research units

Frequency N / %	Variable		Frequency N / %	Variable	
33(55) 19(31.7) 8(13.3)	20-29 30-39 40 years and older	Age	25(41.7) 35(58.3)	Yes No	Income sufficiency
38(63.3) 10(16.7) 12(20)	Less than 20 20-24 25 years and older	Age of first use	60(100) 0(0)	Yes No	Hookah smoking in recent months
34(56.7) 3(0.5) 12(0.20) 11(18.3)	Friends Spouse Myself Family	Consumer incentives	11(18.3) 20(33.3) 18(30) 11(18.3)	Less than 1 year 1-5 year 5-10 year More than 1 year	History of consumption
7(11.7) 10(16.7) 25(41.7) 18(30)	Sister or brother Spouse Friends Parents	Family relationship with the consumer hookah	56(93.3) 4(6.7)	Yes No	History of consumption the family and friends
50(83.3) 10(16.7)	Yes No	The decision to Withdrawal	47(78.3) 4(6.7) 4(6.7) 5(8.3)	Friends Parents Spouse Loneliness	First start taking
30(50) 13(21.7) 17(28.3)	Local Fruity Combination of both	Tobacco type	3(0.5) 27(45) 14(23.3) 13(21.7) 3(0.5)	Illiterate High school diploma Diploma Associate Degree Bachelor's Degree or higher	Level of education

Table 2: Assess the knowledge of the research units before and after the intervention

After intervention		Before intervention		Group
%	N	%	N	Statistics
0	0	10	6	Low knowledge (16.4>)
0	0	70	42	Moderate knowledge (16.4-33.1)
100	60	20	12	High knowledge (33.1<)
45.98		24.72		Mean
2.1		8.41		Standard deviation

Table 3: Assess the attitude of the research units before and after the intervention

After intervention		Before intervention		Group
%	N	%	N	Statistics
5	3	100	60	Positive attitude (45<)
0.95	57	0	0	Negative attitude (45>)
31.15		65.5		Mean
8.18		4.55		Standard deviation

Table 4: Assess the Practice of the research units before and after the intervention

After intervention		Before intervention		Group
%	N	%	N	Statistics
73.3	44	25	15	Favorable
26.7	16	75	45	Unfavorable
5.13		2.72		Mean
1.79		2.03		Standard deviation

Table 5: Comparisons between of the research units of Knowledge, attitude and practice before and after the intervention

p-value	df	t	Mean difference	Standard deviation	Mean	N	Statistics	Indicator
0.001	59	-21.9	23.21	8.41	24.72	60	Before intervention	Knowledge
				2.1	45.98	60	After intervention	
0.001	59	28.98	28.25	4.55	65.5	60	Before intervention	Attitude
				8.18	31.15	60	After intervention	
0.001	59	-8.16	3.00	2.02	2.72	60	Before intervention	Practice
				1.79	5.13	60	After intervention	

Discussion: Awareness of subjects of harms of using hookah has been 10% of low awareness, 42% of average awareness and 20% of high awareness. Moreover, mean awareness of subjects before intervention has been 24.72% with standard deviation 8.41. The results of Haroun et al showed that awareness of research samples has been at average level (48%).¹⁰ The results of Cauchi and Mamo study show that more research unit had average awareness that is consistent with the results of the present study;¹¹ moreover, Andrew study confirms this result.¹² Al-Haqwi and VanDevanter study is consistent with the recent finding of the researcher.^{5,13} The frequency

of subjects' awareness of the harms of using hookah after intervention indicates that 100% of subjects are at high awareness. The results of Jradi et al study showed that about 60% of research units have average awareness concerning harms of using hookah that is consistent with the present study.¹⁴ The comparison of the awareness of subjects before and after intervention show that the difference between means of after and before intervention is 23.21 and t statistical test has shown meaningful difference before and after intervention (p=0.001). The results of the study showed that before intervention, the attitude of subjects toward hookah use has been

100% positive that after intervention 5% had a positive attitude and 95% had a negative attitude. Moreover, the mean of subjects' attitude before intervention has been 65.50 with standard deviation of 4.55 that has changed to 31.15 with standard deviation 8.18 after intervention that indicates a negative attitude of subjects concerning hookah use. Results of Cauchi and Mamo study showed that positive attitude toward using cigarette has meaningful relation with continuing using cigarette and negative attitude toward smoking cigarette has reverse relation with its continuance.¹¹ The results of Haroun et al study showed that positive attitude of research units toward safety of using hookah rather than cigarette is a factor for not leaving hookah that is consistent with present study.¹⁰ The results of Tao et al study showed that the positive attitude of research units toward smoking cigarette has a meaningful relation with the possibility of becoming smoker and negative attitude toward cigarette decreases the probability of becoming smoker.¹⁵ Moreover, the result of this study is consistent with the results of Awojobi and Croucher studies.¹⁶ In study of subjects Practice showed that the mean Practice of subjects has been 2.72 before intervention with standard deviation of 2.03. The results of Haroun et al study showed that research units have had the desired of Practice after training that is consistent with the present the study.¹⁰ The comparison of the Practice of subjects toward hookah using before and after intervention show that the Practice of most research units concerning hookah consumption has been 25% desired and 45% undesired that after intervention 73.3% have been reported in desired level and 26.7% at undesired level. Moreover, the mean Practice of subjects before intervention has been 2.72 with standard deviation of 2.03 that has changed to 5.13 with standard deviation of 1.79 after intervention. The difference between mean Practice of subjects before and after intervention is 3.00 and t statistical test show meaningful difference before and after training ($p=0.001$) that is consistent with the results of Barati et al study on misuse of ecstasy following training intervention.¹⁷ Moreover, it is consistent with the results of Bashirian et al study and implementation of training intervention and also with the, present study.¹⁸ It worth noting that in this study the physical and mental status of individuals, environmental noises, time and space conditions might be effective in manner of responding. To prevent this effect, it is tried to perform interview in such condition that the

research unit respond to questions after being ready. Since drug consumption is expanding especially among young women and girls and big drug companies are seeking for a replacement for consuming men who suffer from early death. The authorities of health and medical care should take proper actions to increase individuals' awareness especially women awareness.

Conclusion: In this study, concerning the fact that the awareness and attitude and Practice of subjects were at average level meanwhile using hookah, it is a necessity that the authorities of health and medical care increase the awareness of people of community through film, booklet and proper training. Concerning the results of this study, the issue of awareness of the current condition and recognition of effective factors on drug abuse is considered a necessity and requirement; thus, presenting real information and proving sufficient free training in all educational levels and training of harms of tobacco should be considered as a main part of training in schools, offices and universities.

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