The Role of Socio-Demographic Factors Associated with Cigarette Smoking among Young People

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Abstract

Introduction: Cigarette smoking (CS) is a psychological phenomenon that drives young people to smoke. This study was aimed to explore the role of socio-demographic factors associated with cigarette smoking among young people in 2019.

Methods: This cross-sectional study was carried on 230 young people who were selected by simple random method in 2019, western Iran. Data collection were used by demographic and risk behaviors of CS questionnaires. Data were performed with SPSS software version 22 and descriptive, logistic regression tests was used. Significance level was considered < 0.05.

Results: The Mean (± SD) age of the participants was 21.13 (± 0.89). The prevalence of current cigarette smoking and ever cigarette smoking was 12.2% and 23%, respectively. The results of logistic regression revealed that ever CS (p < 0.001) and having family smoker (p = 0.026) were predictor factors for current CS.

Conclusion: According to prevalence of CS young people, planning and implementing interventions for raising young people' and family's awareness concerning the negative effects of CS is needful to enable behavior change.

Keywords: Cigarette Smoking; Young People; Prevention

Abbreviations

CS: Cigarette Smoking; CDC: Centers for Disease Control

Introduction

Cigarette Smoking (CS) is an important risk factor for cancer and is associated with the risk of cardiac arrest, respiratory infections, gastric ulcers and depression [1]. Smoking even one cigarette a day raises the risk of cancer and cardiovascular disease [2]. It is predicted that 70% of annual deaths due to smoking will occur by 2030 in developing countries [3]. To determine smoking behavior, guidelines from the Centers for Disease Control (CDC) indicate that if a person has consumed at least 100 cigarettes in their lifetime, they will be considered an ever cigarette smoker. If a person smokes during a study or study period, he is defined as a current cigarette smoker and if not, he is defined as an ex-smoker. He is also a never-smoker who has never smoked 100 cigarettes [4].

The results of studies show that smoking is increasing among young people in developed and developing countries, and on the other hand, the age of onset of smoking is also decreasing [3,5]. In the United States, 15% of adults smoke daily [6]. In Iran, 15.3% of people aged 64 to 15 smoke [7]. In another study in Iran, the prevalence of CS (current and ever) between the ages of 15 and 64 was reported 12.5%,

compared with 4.23 % for men and 1.4 % for women [8]. CS at a younger age is very worrying, so it is a strong predictor of smoking in adulthood [9]. If you start smoking regularly in early teens and early adolescence, the chances of dying prematurely from smoking-related illnesses increase by 50 percent [3]. The onset of smoking in juvenile and young adults is a complex behavior that depends on many factors, including political, psychological, social, biochemical and economical [10]. Various studies have suggested many risk factors for CS, including lower-socioeconomic status, dealing with smoking friends and peer pressure, and the parenting style to social needs during adolescence, Lack of commitment to religious issues, mental instability, alcohol misuse, drug/addiction abuse, age, education, gender, race/ethnicity and poverty [11-13].

The results of CS-related studies show that the prevalence of this harmful behavior is increasing among young people and in general, epidemiological research identifies the causes and factors of high-risk behaviors like CS [1]. It seems necessary to do this research before implementing educational interventions, so this study aimed to determine socio-demographic factors associated with CS among young people in 2019.

Methods

In this cross-sectional study, 230 young people were selected by simple random sampling. Given that studies related to smoking have shown different amounts of prevalence, to determine the sample size, the prevalence of CS in a study was % 21 [9] and with 95% confidence level and 5% accuracy, the sample size was obtained 238. The response rate of this study was 96.6%. The inclusion criteria of this study were: lack of physical or mental illness in young people, as determined by the researcher and reading, writing literacy and participants completed the questionnaire to participate in the consent study. The exclusion criteria were: 1. reluctance to complete the questionnaire and 2. Mental and physical illnesses.

Instrument

Data collection tool consisting of two parts: demographic characteristics (age, education level and marital status) and CS risk factors among young people. To investigate behavioral risk factors for CS, variables such as ever CS (yes/no), current CS (yes/no), friends who smoke (yes/no), CS by family members (yes/no) and shisha smoking (yes/no) were asked. It takes 15 to 20 minutes to complete the questionnaire. Before collecting information, the objectives of the study were explained to the participants by the researchers and after obtaining written consent, the questionnaire was completed by self-report method. The present study was approved by the Ethics Committee of the AJA University of Medical Sciences.

Data analysis

Statistical analysis was performed with SPSS Version 22 and descriptive tests and regression analysis. Significance level was considered less than 0.05.

Results

Most of participants (% 66.1) were 19 to 22 years. The mean (± SD) of the age of the participants was 21.13 (± 0.89). % 49.1 of them was Diploma. Regarding to marital status, 202 (% 87.7) were single. Table 1 shows the demographic information of the participants.

Variables		n (%)
Age	19 - 22	152 (66.1)
	22 - 26	78 (33.9)
Education	Diploma <	57 (24.8)
	Diploma	113 (49.1)
	Associate	17 (7.4)
	MS and upper	43 (18.7)
Marriage statues	Single	202 (87.8)
	Married	28 (12.2)

Table 1: Demographic information for participates (n = 230).

Of the behavioral risk factors for CS, 53 (%23) of participants had smoked cigarette in the past life. Also 28 (12.2%) were current cigarette smoker. 62 (%27.7) of participants had cigarette smokers in their family. Table 2 shows behavioral risk factors of CS among young people.

Variables		n (%)
Ever cigarette	No	177 (77.0)
	Yes	53 (23.0)
Current cigarette	No	202 (87.8)
	Yes	28 (12.2)
Family cigarette	No	168 (73.0)
	Yes	62 (27.0)
Friend cigarette	No	123 (53.5)
	Yes	107 (46.5)
Ever WPS	No	134 (58.3)
	Yes	96 (41.7)

Table 2: Risk behavioral of CS in participates (n = 230).

The findings of the current study showed that among the behavioral risk factors, only ever CS (P < 0.001) and smoker in family were predictors of CS in young people (p = 0.026) (Table 3).

Variables	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Age	.680	.863	.621	.431	1.975	.364	10.725
Education			5.240	.155			
Education (1)	-.185	1.251	.022	.883	.831	.072	9.654
Education (2)	-1.661	1.091	2.316	.128	.190	.022	1.613
Education (3)	-.257	1.170	.048	.826	.773	.078	7.664
Married	1.396	.877	2.534	.111	4.039	.724	22.529
Ever cigarette	3.955	.843	22.040	.000	52.221	10.015	272.289
Family cigarette	1.658	.746	4.934	.026	5.249	1.215	22.672
Friend cigarette	-.732	.865	.716	.397	.481	.088	2.622
Ever hookah smoking	.490	.751	.426	.514	1.632	.375	7.107
Constant	-7.567	2.550	8.803	.003	.001		

Table 3: Logistic regression includes demographic variables and risk behaviors for predicting current CS (n = 230).

Discussion

One of the findings of the present study was that 23% of young people had a lifetime of smoking. The prevalence of lifetime smoking in Ahmadi., *et al*. study [14] was 22%. Also, Hussain., *et al*. [15] have shown that 20% of young people smoked cigarette in the past life, which is consistent with the results of the present study.

It seems that CS among adolescents and young is revolved to be a desirable, self-esteeming, and considerable behavior, so CS is tried at this time before entering the young. Therefore, designing, implementing and evaluating preventive and educational interventions in schools and families to raise awareness of the negative effects of smoking on health, strengthening self-efficacy in smoking prevention seems necessary.

Another result of the present study was that current CS rate among young people was 28%. Yasmin., *et al.* [15] reported 32% of current CS among young people, which is consistent with the results of the present study. The results of other studies [16,17] reported a prevalence of current CS 47% and 56, respectively, which is inconsistent with the results of the present study. Prevention of CS is vital. If young people do not start smoking by the age of 26, they will definitely never quit smoking again. So, it is possible to facilitate easy decisions for the youth through the desired education.

One result of the present study was that past CS was a predictor of current CS among young people. Given the past smoking experience, it can be inferred that in the past CS experience was due to passing the barriers to smoking and the resulting experience, and given the particular period of being young that is self-driving, so having a consumer experience in your past as a facilitator is a continuation of your current CS. Concerning the findings of the present study, the results of Joseph., *et al.*'s [18] study indicated that past smoking experience is a predictor of current CS. In the study of Hussein., *et al.* [14], a history of past addiction as a predictor of CS was also obtained.

Another finding of this study was that smoking by a family member is a predictor of CS in young people. In line with the results of the present study, the findings of another study [17] also showed that in a family where one member smokes, the young people is more likely to start CS. Also, the study by Bashirian., *et al.* [19] showed that smoking in a family member causes it to be used in adolescents. Educational interventions should not only address young people, but also focus on the beliefs, attitudes, and behaviors of family members about the dangers of smoking.

Although various studies [5,14,20-22] have shown that having friends cigarette smoking is a factor in CS in young people, this result was not achieved, however, given the role of reinforcing factors such as friends in the tendency to CS, addiction, prevention or abandonment of addiction is crucial, and also because of the profound influence of friendship behaviors and patterns in adolescence, young and especially in the military, so the importance of informing friends about the effects of smoking on friends during the military period, so provided the interventions and training is necessary.

Limitations of the Study

Due to the nature of the cross-sectional studies that are based on the report in the form of a questionnaire, completion of the questionnaire was a self-report method that may not be accurate. It is better to do, biochemical tests, but our results were not biochemically confirmed.

Conclusion

The purpose of this study was to determine the role of socio-demographic factors affecting CS in young people. The findings of the present study showed that the history of current and ever cigarette smoking among young people is high. Experience of past ever CS and having a cigarette smoker family is a predictor of CS among young people, so it is recommended to inform the negative effects and consequences of CS on families' health, as well as the development of training packages related to the negative consequences of CS for young people.

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Declaration of Interests

The authors declare that there is no conflict of interest.

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