

Smoking between Young Workers in Healthy Field, Trigger Factors and Reasons of Cessation

Fatima Alhamed Alduihi (✉ dr.duihi88@hotmail.com)

Aleppo University <https://orcid.org/0000-0003-1083-9005>

Research Article

Keywords: Smoking, tobacco, shisha, awareness

Posted Date: October 2nd, 2020

DOI: <https://doi.org/10.21203/rs.3.rs-85884/v1>

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Abstract

Background: Smoking is an important factor correlates with morbidity and mortality all over the world and it still a real challenge according to the promotion of tobacco companies and war conditions. It correlates well with emphysema and cancers of lung and bladder in elderly adults.

Materials and Methods: A cross-sectional questionnaire-based study was applied to workers on healthy field and medical students in age (15-45) in Aleppo University Hospital. They were divided into 2 groups (smokers and non-smokers). This study aims to define the relationship between smoking and different variants in young ages.

Results: The study included 169 healthy workers (93 males, 76 females). Smokers were 88 (52.07%), 62.5% active and 37.5% passive. Most of them classified as lighter smokers, whereas 13.6% were heavy smokers. 37 of smokers (42.53%) smoke shisha. 68 smokers want to stop smoking (77.27%), and 61 of them (69.31%) try that. Only 4 smokers try drugs or electronic cigarette.

Promotion is the most common trigger factor for smoking 38.27% followed by war 30.86%. Genders, living with a smoker and awareness of the correlation between shisha and tuberculosis, have a statically significant between the two groups of study ($p = 0.009$, <0.0001 , 0.041) respectively. Weight and regular sporting have no significance.

Conclusions: Promotion is still the first reason for smoking between young ages. Awareness by the risk of tuberculosis by shisha, living with smoker people and gender correlates well with the smoking and plays a role in this field.

Introduction:

Smoking is still one of the biggest challenges that faced the healthy field in general, and pulmonologist, specially. Smoking records high prevalence rates everyday all over the world, and also the mortality regarding diseases correlated with smoke.

The last records of world health organization (WHO) refer to that tobacco kills more than 8 million people each year. More than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke. There are 1.3 billion smokers around the world, 80% of them lives in low- and middle-income countries [1]. Smoking is an important reason for the diseases of heart and lung [2, 3]. It correlates with cancers of urinary tract [4]. Youngers now are more likely to smoke by effect of many factors, wars, family problems, social state, social communication and under the effect of tobacco companies promotion. In countries that are low come, there's no enough health awareness for people in early ages, so they smoke more than advanced countries.

People who work in healthy field are more likely to work under pressure, and to suffer from many pressures in work and out of work. Smoking spreads between university students, young students and professionals in healthy field.

This study aims to define the relationship between smoking and different variants in young age's people in healthy field.

Methods:

Population:

Control case study was applied to workers on healthy field and medical students in age (15-45) in Aleppo University Hospital. They were divided into 2 groups (smokers and non-smokers). This study aims to define the relationship between smoking and different variants in young ages.

Data collection:

A questionnaire was applied to all the participants, and only participants who gave his or her consent for the collection and use of their data were included.

The variants were collected included: gender, age, the educational level, weight, regular sport, living with smoker in the same home, time of beginning smoking, trigger factors, classification of smoking, willing to stop, trying to stop, ways to cessation and the awareness of risk that correlates with shisha smoking.

They were divided to: smokers and non-smokers. Smokers are 2 sub-groups, active smokers, who are smoking cigarettes or shisha or both, and passive smokers who live or work with smokers

Classification of smoking was suspected according to the number of cigarettes that a person smokes on one day as:

I. Light smokers: less than 10 cigarettes

II. Middle smoker: less than 20 cigarettes III. Heavy smoker: less than 40 cigarettes

Statistical analysis:

Demographic characteristics and variables of interest were summarized by smoking status (smoker vs. non-smoker) using descriptive statistics: mean (SD) for continuous variables and frequency (proportion) for categorical variables.

To assess the risk factors, logistic regression was used, and the results are reported as an odds ratio, with a 95% confidence interval. A p-value of less than 0.05 was used to detect the statistical significance. χ^2 (chi square) is used as a test for statistical significance. Analysis was performed using IBM SPSS statistical software 23.

Studying the pattern of smoking (active or passive) was then performed.

Analysis was performed using IBM SPSS statistical software 24.

Results:

169 worker and medical student were included. 88 of them were smokers (52.1%) and 81 were none (47.9%). 64.77% of smokers were men. The first trigger factor to smoke was promotion of tobacco companies and between friends (38.27%), whereas the studying failure was in the last list of factors (7.41%). 40% of smokers were light smokers, medium 39% and only 19% were heavy smokers (figure1) . (37 of smokers were smoking shisha (42.05%), we suppose that 15 minutes from smoking of shisha (water pipe) is equivalent 10 cigarettes. Gender, living with smoker, and awareness of the relationship between shisha and tuberculosis have a significant between the two groups of study ($p = 0.009, <0.001, 0.041$) respectively. Weight and regular sporting have no significance (table 1). Studying the risk estimate for the variants (table2)

By studying the 2 subgroups of smokers, (active and passive), we find: there's important statically significant for; gender, weight smoking shisha, ($p = <0.001, 0.03, 0.014$) respectively (table3). Studying the risk estimate of variants also summarize in (table4).

Figure2 shows the lines of trigger factors for the two patterns of smokers. 68 smokers want to stop smoking (77.27%), and 61 of them (69.31%) try that. Only 4 smokers try drugs or electronic cigarette.

Discussion:

The important findings in this study were: Smoking is still challenge and promotion is the first trigger factor even though all the awareness campaigns of the harmful effects of smoking, which reflects the role of tobacco companies. This finding accepts with the study performed by Krugman, Dean M., et al [5] and also accepted with Cauchi, Daniel, and Julian Mamo [6] who recommended banning of tobacco sales to adolescents. Study shows war as a trigger factor for smoking between young workers and students in healthy field that supports the study performed by Kakaje, A., et al. in Syria [7] and Haddad, Chadia, et al in Lebanon after civil war, which refers to high prevalence rates of smoking after war according to the WHO records [8]. Family problems were important trigger factor for beginning of smoking or severe the case of smoker in 24% of cases in the study, and that is closed to results of Banzer, Raphaela, et al. [9].

Studying failure was the less important factor between the factors we study, and that looks to be closed to Azevedo, Renata Cruz Soares de study that suggests the higher education as a risk factor correlated with failure to quit smoking among smokers [10]. Men smokes more than women, and there is a high significance for gender in the study ($P=0.009$). Living with smoker is a risk factor to be an active smoker, and passive smokers on risk of heart disease by inspiriting other's smoke, even they didn't smoke. A Chinese study suggests living with smoker as an important factor against smoking cessation [11], which

supports our study result that find an important statically significance ($p < 0.001$) between the 2 groups of study (smokers, non-smokers).

The healthy awareness about risks of smoking in general, and the risk between shisha and tuberculosis [12], was important factor in our study and has a significance ($p = 0.041$) which is so closed to the study [13]

This study suggests weight as a risk factor for smoking. More weight, more smoke. There's many studies suggests smoking as a reason of overweight in younger ages, which is so close to many studies [14, 15, 16], even though, from the opposite side, there are many studies suggests weight gain after smoking cessation [17, 18]

Risk estimate for the 2 subgroups of smokers were summarize in table4.

One of the important outcomes of this study, smoking shisha has a high prevalence between younger smokers, and that is a risk factor, closing to the result of Nelson, R. [19]. Another study was performed in KSA [20] showed a high prevalence of shisha smoking between male students of medical colleges, which is accepted with our result. Hookah or shisha is another face of cigarettes, and tobacco companies try to produce it as an alternative of cigarettes. Many participants when you ask them, do you smoke, they answer no but when you ask about shisha, then yes! By comparing this result with study performed in USA [21] that clears most of shisha smokers think that isn't harmful to their health, and that is also bright the result of the role of awareness of shisha harmful effects on health in general, and pulmonary diseases in specialty.

The most important limitations of this study are the ability to define the real dose of tobacco between people who smokes shisha, the time of smoking was closed to suspect in our study.

Other limitation was in responding; most of women weren't responding well, so they were excluded, smoking in some regions is sensitive subject to girls, so we need more information regarding this point.

Conclusions:

Smoking still a challenge faces doctors and health professional all over the world. Social relations, family problems and promotion are risk factor for smoking between Youngers. Shisha smoking is a new challenge which needs more awareness of the harmful effects of this tobacco product.

Healthy awareness is the most important factor that can help to fight this bad habit between Youngers.

We need more studies about the real prevalence of smoking between workers in healthy field.

Declarations:

Consent:

Each participant gave his or her written consent for the collection and use of their clinical data.

Funding:

The author received no financial support for the research, authorship, and/or publication of this article.

Declaration of Interests:

There's no potential conflict of interest to report

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Tables:

Table1-Demographics and other characteristics				
		Non-smokers (n=81)	Smokers (n=88)	P value
Gender	Female	45(55.56%)	31(35.23%)	0.009
	Male	36(44.44%)	57(64.77%)	
Living with smoker		21(25.92%)	58(65.9%)	<0.001
awareness of the relationship between shisha and tuberculosis		42(51.58%)	60(68.18%)	0.041

Table2. Risk estimate for variants between the 2 groups of study

All cases	OR	95% CI		P value
		Lower	Higher	
Gender (man)	0.686	0.514	0.915	0.009
Living with smoker	0.393	0.264	0.585	<0.001
Weight (less than 60 kg)	1.347	0.875	2.75	0.193
Awareness of the relationship between shisha and tuberculosis	0.760	0.590	0.980	0.041
Regular supporting	1.029	0.582	1.819	1

Table3. Demographics and other characteristics between smokers

		Active-smokers (n=55)	Passive (n=33)	Smokers	P value
Gender	Female	9(16.36%)	22(66.66%)		<0.001
	Male	46(83.64%)	11(33.34%)		
Weight	Less than 60 kg	11(20%)	14(42.42%)		0.030
	More than 60 kg	44(80%)	19(57.58%)		
Smoking Shisha		29(52.72%)	8(24.24%)		0.014
Regular sport		14(25.45%)	5(15.15%)		0.193
Living with smoker (active smoker)		35(63.63%)	23(69.69%)		0.646

Table4. Risk estimate for variants between smokers

All cases	OR	95% CI		P value
		Lower	Higher	
Gender (man)	2.509	1.527	4.122	<0.001
Willing to stop (no)	1.113	0.479	2.586	1
Weight (more than 60 kg)	1.389	1.008	1.916	0.030
Trying to quit (yes)	1.236	0.325	1.352	0.367
Regular supporting	1.680	0.666	4.239	0.296
Smoking shisha	2.109	1.101	4.041	0.014

Figures

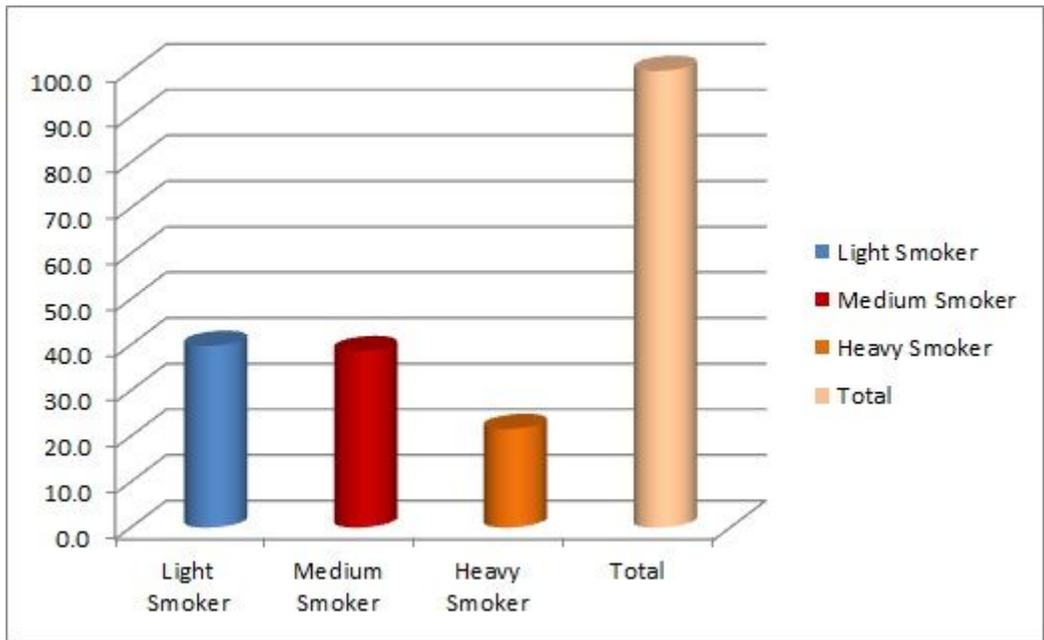


Figure 1

Classification of smokers

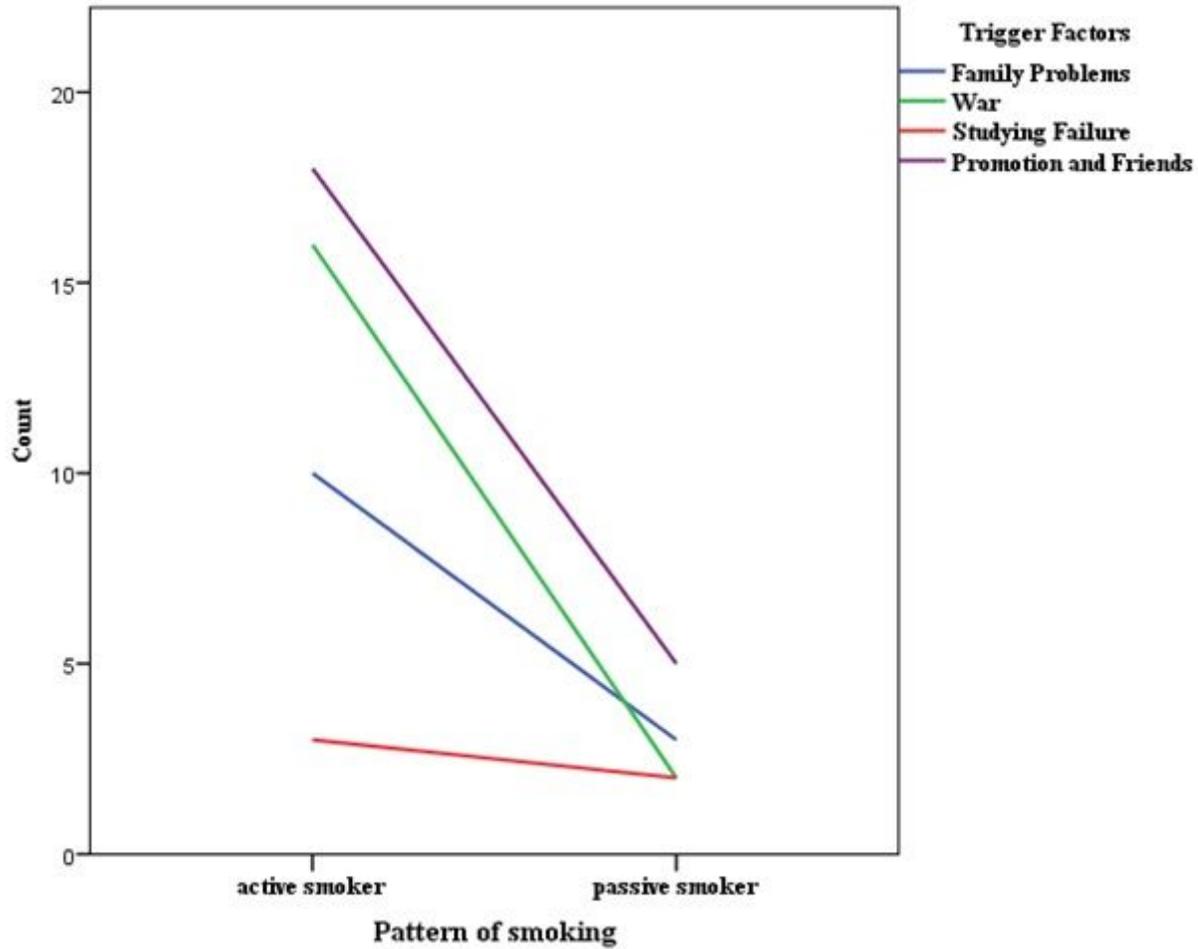


Figure 2

Lines of trigger factors for the two patterns of smokers