Review article



Awareness of Smoking among Medical Staff in KSA

Manal Abdulaziz Murad ¹, Hoda Jehad Abousada ^{*2}, Raghad Khalid Aljuaid ³, Amal Saud Almaqati ⁴, Rawan Saleh Alotibi ⁴, Anas Ali Alzahrnai ⁵, Matuq Abdulrahman M Zamzama ⁶, Jabr Nahar Bin Jabr Alsulami ⁷, Sarah A. Alghabban ⁸, Amirah Saad Algethami ⁹, Amal Mihmas Alosaimi ⁹

¹Assistant Professor of Family Medicine, Consultant Family Medicine, Family Medicine Department, King Abdulaziz University, Jeddah, *mmurad@kau.edu.sa*²Corresponding Author: KSA (Postal Address: Jeddah, 22338; *dr.huda1992@outlook.com*)
³Service Resident, King Faisal Hospital, Makkah, KSA
⁴Medical Intern, Umm Alqura University, Makkah, KSA
⁵Albaha University, General Practitioner, Family Medicine, Albaha - KSA
⁶Service Resident, King Abdulaziz General Hospital, Jeddah, KSA
⁷Medical Intern, Shaqra University, Shaqra, KSA
⁸Medical Intern, Alfaisal University, Riyadh, KSA

*Corresponding author: Hoda Jehad Abousada; dr.huda1992@outlook.com

Received: 30 November 2020;

Accepted: 18 December 2020;

Published: 20 December 2020

Abstract

Among most medical staff, Smoking is very common and, in this research, we aim To Determine awareness of smoking in medical staff, smoking differences between gender and nationality in KSA. Then we overviewed the rates of smoking in different age groups in the general population. We want also to know the connection of this awareness to smoking or quitting, which may cause future plans that provide for the shedding of light on psychological treatment and mental persuasion to help quit smoking.

These study participants were Medical workers from Saudi Arabia and the results may not be applied to different sittings due to differences in facilities and work conditions.

Conclusion: It is evident through the results that smoking is very common among doctors, especially men, and smoking is more common among people over 55 years of age than others.

In addition to these negatives, most of the sample is aware of the negative aspects of smoking and its risks in the future, but the majority of them still smoke.

Keywords: Smoking, medical staff

1. Introduction

Tobacco smoking consider the leading cause of preventable death in the world ^[1]. Smoking is a problem of the age, and smoking addiction is one of the most worrying and affecting matters on health. Smoking is associated with many diseases that may lead to death.

Now, about 5.4 million people die every year from smoking and their related disease and most of death occur in developing countries. The prevalence of smoking in Saudi Arabia is approximately 21% among general population and 25 % among medical staff^[2].

The quality of life and general health that associated with smoking usually improve when cessation ^[3-6]; Smoking-

dependence treatment and counselling have been recommended to help smokers quit.

It has been documented that a brief advice to the patient can decrease smoking rates in developed country so, the Physicians can play a major role in reducing the tobacco burden ^[7,8].

The physicians have opportunity to counsel their patients about smoking cessation when the patient visit the clinic. There are many reasons that explain why physicians don't intervene with patient that uses smoking include : Reduce of proficiency and training about smoking cessation methods^[9-11], lack of confidence and self-efficacy in counselling skills^[9-12], lack of time^[11,12], and a health system that does not support tobacco cessation services^[12].

Low level of com-potence in tobacco cessation practice among doc-tors has been linked to low level of knowledge

associated with the smoking cessation practice guidelines among medical students ^[13].

There are no published studies that have reported on the extent to which physicians and medical staff in Saudi Arabia are knowledgeable about tobacco dependence treatment, and no attention has been paid to the Saudi medical school's core curricula in tobacco education.

The objectives of this study are to determine the relationship between gender, age, and nationality to increase incidence of smoking, to identify Relationship between socioeconomic status and smoking and to measure Prevalence of smoking, number of cigarettes per day and duration of smoking is Saudi Arabia.

2. Methods

2-1. Study design

This is an analytical cross-sectional study.

2-2. Study Setting and period

This is an analytical cross-sectional study conducted in kingdom of Saudi Arabia (Medical staff) from 22/08/2020 till 22/11/2020.

2-3. Inclusion criteria: Medical staff

2-4. Exclusion criteria: None

2-5. sampling method: The study will be carried out by questionnaire.

2-6. Sampling size: Sample size will be calculated using OpenEpi for sample size calculation for cross sectional by those who experienced smoking patient

2-7. Measurements

Explanatory variables:

- 1. Sociodemographic characteristics: age, gender, nationality and monthly income.
- 2. Disease-related information: Smoking, awareness.

2-8. Outcome measures

The outcome measure is by counting the ratio of the number of medical staff they smoker this will be measured using:

By determining the extent of the disease that occurred associated with addiction of awareness of smoking.

2-8. Prevalence study: will be carried to test the questionnaire if easily understood and the response of the participants. Data from the cross-sectional study will be used to calculate the sample size.

2-9. Data Management and Analysis plan:

Data will be entered and analyzed using SPSS version 17.0 Descriptive statistics will be performed and categorical data will be displayed as frequencies and percentages while measures of central tendencies and measures and dispersion will be used to summarize continuous variables. Univariate and multivariate analysis will be performed to investigate association between exposure factors and associated disease. statistical significance is set at a P value of 0.05 or less.

2-10. Statistical analysis

Data were entered and analyzed using Statistical Package for the Social Sciences (SPSS) version 17. Descriptive statistics were displayed as frequencies and percentages for categorical variables. Measures of central tendencies (the median), and measures and dispersion (minimum – maximum) were used to summarize continuous variables, as the continuous variables were not normally distributed when tested by Shapiro-Wilk test. Univariate analysis was performed to investigate the association between the exposure factors with the outcome on the one hand, this was performed using Chi-squared test and Mann-Whitney test. Multivariate analysis to investigate factors independently was performed using binary logistic regression. P value was set at a significance level of < 0.05.

3. Literature review

Smoking incidence differs as ages, genders and races differ, in this study in the USA we will review this difference in such country with so many different groups of population ^[14].

The results were as: Rates of ever smoking, current daily smoking, and quitting were discussed. Overall, 54% of recruits had ever smoked a cigarette and 24.9% smoked daily at the time of entry into basic military training.

Smoking rates were highest among white and Native American recruits. Among whites, women were more likely to be a current daily smoker (31.6% vs. 29.4%).

The opposite pattern was observed among African-Americans (5.6% vs. 9.8%, respectively). Current smokers had low levels of nicotine dependence compared with the general population of U.S. smokers, but whites tended to be more dependent than other ethnic groups. Cessation rates were similar for men and women but differed according to ethnicity, ranging from 15% among whites to 23% among Hispanics.

Logically, smoking should be higher in the low socioeconomic status among different communities as this study that has Respondents of 6,321 adult current smokers from Four Countries, a nationally representative longitudinal cohort survey of smokers in Australia, Canada, UK, and US^[15].

Results said that Smoking is highly concentrated in the social networks of lower SES smokers and this concentration may be increasing over time. Cessation interventions should consider how the structure of low SES smokers' social networks affects quitting ^[15].

On the number if cigarettes consumed each day, we review the CDC statistics as they say:

Among daily smokers, the average number of cigarettes smoked per day declined from about 17 cigarettes in 2005 to 14 cigarettes in 2016. The proportion of daily smokers who smoked 20 to 29 cigarettes per day dropped from 34.9 percent in 2005 to 28.4 percent in 2016, while the proportion who smoked fewer than 10 cigarettes per day rose from 16.4 percent in 2005 to 25 percent in 2016 ^[16].

We notice the decline in the cigarette's consumption decreases through years.

To know how many years, do person smoke we take this sample of university students as the results were: The mean age of students was 21.70 ± 2.73 years, and 92% of them were single. The prevalence of smoking was 27.3% including 35.4% of men and 12.6% of women. The mean duration of smoking was 4.22 ± 3.05 years ^[16]. This duration should be higher in older population.

Locally in Saudi Arabia we found a study that showed the prevalence of smoking among different age groups. They concluded that the prevalence of current smoking in Saudi Arabia ranges from 2.4-52.3% (median = 17.5%).

Among school students, the prevalence of current smoking ranges from 12-29.8% (median = 16.5%), among university students from 2.4-37% (median = 13.5%), and among adults from 11.6-52.3% (median = 22.6%).

In elderly people, the prevalence of current smoking is 25%. The prevalence of smoking in males ranges from 13-38% (median = 26.5%), while in females it ranges from 1-16% ^[17]. From those results it is clear that men smoke more than women in all ages.

4. Results:

Baseline characteristics

The study included 221 patients in which among them were 179 males (81 %) and the rest were females. Age group ranged from 20 to older than 80, with most frequent age groups were 71-80 (n= 30, 29.1%) and more than 80 (n= 29, 28.2%). The pie chart in figure 1 shows the distribution of study participants according to age groups.



Figure 1: Distribution of study participants according to age groups

Relationship between socioeconomic status and smoking. Smoking is most common among people with middle levels of monthly income (n = 148, 67%) and the rest has lower or high monthly income.

Table 1 shows the relationship between socioeconomic status and smoking.

Monthly	Mean	Ν	Std. Deviation
Low	2.05	40	.959
Medium	2.04	148	.940
High	2.24	33	.936
Total	2.07	221	941

Prevalence of number of cigarettes per day.

Results show that more than half of participant of the sample smoked from 11 to 20 cigarettes per day (n = 63, 28.5 %) The pie chart in figure 2 shows the number of cigarettes smoking per day.



Figure 2: Shows the number of cigarettes smoking per day.

Prevalence of duration of smoking.

Most of the sample started smoking for a long period of more than 5 years (n=73, 33%) The pie chart in figure 3 shows the duration of smoking.



Figure 3: Shows the duration of smoking.

Prevalence of smoking in Saudi population.

Most participants that answered that they are smokers or exsmokers. were saudian (n = 210, 95 %) and the rest were nonsuadian.

Table 2: Shows the Prevalence	e of smoking in Saudi population
-------------------------------	----------------------------------

Nationality	Mean	Ν	Std. Deviation
Saudi	2.04	210	.940
Non-Saudi	2.64	11	.809
Total	2.07	221	.941

Awareness of medical staff about effects of smoking

About 85 participant (38.2 %) think that quite smoking will benefit him very much, about 63 (28.5 %) suggest that smoking will somewhat damaged her life, and nearly 55 (24.9 %) expect that smoking will somewhat damage life in future.

Most of participant see that cigearrates smokes dangerous also to non-smokers (n = 115, 52 %).

Table 3: How much do you think you would benefit from health if quit smoking?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	3	1.4	2.6	2.6
	Somewhat	27	12.2	23.5	26.1
	Very much	85	38.5	73.9	100.0
	Total	115	52.0	100.0	
Missing	0	106	48.0		
Total		221	100.0		

Table 4: smoking has damaged your health?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	23	10.4	20.0	20.0
	Somewhat	63	28.5	54.8	74.8
	Very much	29	13.1	25.2	100.0
	Total	115	52.0	100.0	
Missing	0	106	48.0		
Total		221	100.0		

Table 5: how worried about smoking will damage your health in the future?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	13	5.9	11.3	11.3
	Somewhat	55	24.9	47.8	59.1
	Very much	47	21.3	40.9	100.0
	Total	115	52.0	100.0	
Missing	0	106	48.0		
Total		221	100.0		

Table 6: Cigarettes smoke it's dangerous to non-smokers?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	.9	1.7	1.7
	Neither	9	4.1	7.8	9.6
	Agree	104	47.1	90.4	100.0
	Total	115	52.0	100.0	
Missing	0	106	48.0		
Total		221	100.0		

5. Discussion

When discussing our findings, Smoking is more common in male and in people older than 55 years old, also it is common in saudian medical staff other than non saudian, also the smoking is most frequent in sample of middle monthly income. Also, we found that the number of cigarette smoking and duration of smoking are somewhat high. In addition to these results, we found that most medical staff are aware about negative effects of smoking as most of them suggest that smoking may destroy his life and other expect that the smoking may affect and damage life in the future. Also, most medical staff agree about the non-smoker may have a dangerous effect from smoking. As we know the smoking is addictive and most participant agree that.

6. Data availability

They are available upon reasonable request.

7. Conflict of interest

Authors have no conflict of interest to declare

8. Funding statement

Self-funded

9. Acknowledgments

The authors would like to thank the participants for their great cooperation, Participants will be especially from Medical staff selected and carried out by questionnaire.

We thank the data collectors who collected the data from the patients, they worked hard to collect data greatly, and a large sample number was collected for their great effort.

References

- WHO 2010. World health report: Health systems financing-the path to universal coverage. Geneva, Switzerland. http://www.who.int/whr/2010/whr10_en.pdf (RetrievedJanuary 12, 2013).
- [2] Al-Haqwi A, Tamim H, Asery A. Knowledge, attitude, andpractice of tobacco smoking by medical students in Riyadh, Saudi Arabia. Ann Thorac Med 2010;5(3):145– 8.
- [3] U.S. Department of Health and Human Services. 2010. How tobacco smoke causes disease: the biology and behavioralbasis for smoking-attributable disease: a report of the surgeon general. Atlanta, GA: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion, Office on Smoking

and

Health.http://www.surgeongeneral.gov/library/reports/to bacco-smoke/index.html(Retrieved January 12, 2013). Ward KD, Vander Weg MW, Kovach KW, Klesges RC, DeBon MW, Haddock CK, Talcott GW, Lando HA. Ethnic and gender differences in smoking and smoking cessation in a population of young adult air force recruits. Am J Health Promot. 2002 May-Jun;16(5):259-66. doi: 10.4278/0890-1171-16.5.259. PMID: 12053437.

- [4] Anthonisen NR, Skeans MA, Wise RA, Manfred J, Kanner RE, Connett JE. The effects of a smoking cessation intervention on 14.5-year mortality: a randomized clinical trial. AnnIntern Med 2005;142:233– 9.
- [5] Doll R, Peto R, Beoreham J, Sutherland I. Mortality in relation to smoking: 50 years_ observations on male British doctors. Br Med J 2004;328:1519.
- [6] Toh CK, Wong EH, Lim WT, Leong SS, Fong KW, Wee J, et al. The impact of smoking status on the behavior and survival outcome of patients with advanced non-small cell lung cancer: a retrospective analysis. Chest 2004;126:1750–6.
- [7] Fiore MC, Jae'n CR, Baker TB, Bailey WC, et al. 2008. Treating tobacco use and dependence: 2008 update. Clinical practice guideline. Rockville, MD: U.S. Department of Health and Human Services 2008. Public Health Service. http://www.surgeongeneral.gov/tobacco/treating_ tobacco_use08.pdf. (Retrieved January 5, 2013).
- [8] Tønnessen P, Carrozzi L, Fagerstro'm KO, Gratziou C, et al. Smoking cessation in patients with respiratory disease: a high priority, integral component of therapy. Eur Res J 2007;29:390–417. http://dx.doi.org/10.1183/09031936.00060806.
- [9] Geller AC, Brooks DR, Powers CA, Brooks KR, Rigotti NA, Bognar B, et al. Tobacco cessation and prevention practices reported by second- and fourth-year students at US medical schools. J Gen Intern Med 2008;23:1071–6.

- [10] Spangler JG, Enarson C, Eldridge C. An integrated approach to a tobacco-dependence curriculum. Acad Med 2001;76(5):521–2, http://journals.lww.com/academicmedicine/ Fulltext/2001/05000/An_Integrated_ Approach_to_a_Tobacco_dependence.55.aspx#P17 /jama.282.9.825 (retrieved December 5,2012).
- [11] Ferry LH, Grissino LM, Runfola PS. Tobacco dependence curricula in US undergraduate medical education. J Am Med Assoc 1999;282:825–9.
- [12] Rigotti NA, Thorndike AN. Reducing the health burden of tobacco use: what's the doctor's role? Mayo Clin Proc 2001;m 76:121–3, http://www.mayoclinicproceedings. com/pdf%2F7602%2f7602el.pdf (retrieved December 12, 2013).
- [13] Raupach T, Merker J, Hasenfub G, Andreas S, et al. Knowledge gaps about smoking cessation in hospitalized patients and their doctors. Eur J Cardiovasc Prev Rehabil 2011;18:334–41.
- [14] Hitchman, S. C., Fong, G. T., Zanna, M. P., Thrasher, J. F., Chung-Hall, J., & Siahpush, M. (2014). Socioeconomic status and smokers' number of smoking friends: findings from the International Tobacco Control (ITC) Four Country Survey. Drug and alcohol dependence, 143, 158–166. https://doi.org/10.1016/j.drugalcdep.2014.07.019
- [15] Smoking is down, but almost 38 million American adults still smoke. (2018, January 18). Retrieved December 02, 2020, from https://www.cdc.gov/media/releases/2018/p0118smoking-rates-declining.html.
- [16] Jafari, F., Haji Zamani, A., & Alizadeh, K. (2011). Reviewing the prevalence of (cigarette) smoking and its related factors in students of tehran university, iran. Addiction & health, 3(3-4), 105–110.
- [17] Bassiony MM. Smoking in Saudi Arabia. Saudi Med J. 2009 Jul;30(7):876-81. PMID: 19617999.