Motivators and barriers to quit smoking among Saudi smokers

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Abstract: ***Background:*** Smoking prevalence in Saudi Arabia was reported a high prevalence and the disparities in smoking-related behaviors among racial/ethnic groups continue to exist. Two of the goals of Healthy People 2020 are to reduce smoking prevalence among adults to 12% or less and to increase smoking cessation attempts by adult smokers from 41% to 80%. To foster successful smoking cessation, public health professionals need to understand better the reasons why smokers quit smoking. As well as the researchers have to study the motivators and barriers that may predict and guide the way for smoking cessation. ***Aim of the work:*** The present study was aimed to identify the different motivators and barriers to quit attempt among Saudi and Non Saudi smokers. ***Results:*** The present study identify multiple of factors as health concern, religious and financial considerations as motivators to quit attempt, while physical and nicotine addiction were the major barriers addressed by the participant preventing their quit attempt. ***Conclusion:*** Healthcare providers, as well as smokers, need to understand the process and challenges of quitting. Healthcare providers can set the stage for successful quit attempts by making evidence-based cessation materials readily accessible and by tailoring cessation strategies by address barriers and motivators identified by smokers.
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Introduction

Cigarette smoking is the leading preventable cause of mortality, responsible for nearly six million deaths worldwide. [(1)] If current trends continue, tobacco will kill more than eight million people worldwide each year by the year 2030. The three major causes of smoking-related mortality are atherosclerotic cardiovascular disease, lung cancer and chronic obstructive pulmonary disease. [(1, 2)]

Smoking prevention is an important health policy target in many countries. [(2)] Smoking cessation effectively decreases the incidence of a number of major diseases, such as cardiovascular diseases and lung cancer, even at relatively old age. [(3)] Studies have found that probability of making quit attempts and success of those attempts vary by demographic characteristics including gender, age and education.[(3, 4)] Smoking behaviors (*i.e.*, amount of smoking, duration of smoking (years since initiation), are also related to the probability of successful cessation, with those experiencing higher levels of dependence being less likely to quit . [(5)]

External factors are also associated with whether a smoker chooses to engage in a quit attempt, including receiving a doctor's advice to quit, having smoking free home rules, community smoking free policies and increase the price of cigarettes. [(6)]

Determining and distinguishing the characteristics of those who are attempting to quit or have quit successfully from those who are current smokers may help guide the implementation of tobacco cessation treatments in order to increase quit attempts. [(7)] Thus, a better understanding of the factors contributing to smoking cessation is needed to meet health policy targets. [(2)]

Studies have suggested that reduced social support for quitting, low motivation to quit, stronger addiction to tobacco, increased likelihood of not completing courses of pharmacotherapy or behavioral support sessions, psychological differences such as lack of self-efficacy, and tobacco industry marketing. [(4, 8)] Evidence of interventions that work among lower socioeconomic groups is sparse. Raising the price of tobacco products appears to be the tobacco control intervention with the most potential to reduce health inequalities from tobacco. [(1)] Targeted cessation programs and mass media interventions can also contribute to reducing inequalities. [(6)] To tackle the high prevalence of smoking among disadvantaged groups, a combination of tobacco control measures is required, and these should be delivered in conjunction with wider attempts to address inequalities in health. [(9)]

While smoking rates have declined in the developed world, the decline has been slower or non-existent amongst low SES groups in these countries. [(10)]

This means that inequalities in smoking rates and inequalities in smoking-related conditions have increased. Disadvantaged smokers are less likely to quit than other smokers for a variety of reasons such as: reduced social support for quitting; lower motivation to quit; stronger addiction to tobacco; increased likelihood of not completing courses of pharmacotherapy or behavioral support sessions; psychological differences such as lack of self-efficacy and tobacco industry marketing. [9, 10]

This study was conducted to evaluate the external factors associated with quit smoking, including receiving a doctor's advice to quit, avoid side effects, damage health, oral health and forbidden in Islam in addition to other behavioral factors act as barriers to engage in quit attempt.

Material and Methods

Subjects: A sample of 5000 smoker's male adults (20 -60 years old) was recruited from different hospitals and centers in Makkah region. The subjects were divided into two different groups Saudi and non Saudi and further divided according to the status of trying smoking quit. Current smokers at the time of interview who they had tried to quit smoking completely and motives for quit. Current smokers at the time of interview who were never stopped smoking for one day and barrier to quit smoking.

Data collection: A questionnaire includes the demographic variables, selected smoking characteristics, motivators and barriers to quit smoking was used. These variables were race, age, smoking status and amount smoked (*i.e.*, number of cigarettes smoked per day), duration of smoking (in years), an indicator of nicotine dependence (*i.e.*, smoke soon after waking, feel relaxation after smoke, relief stress and prefer its odor or make me concentration), workplace smoking, receiving a doctor's advice to quit, knowing the side effects and it is forbidden in Islam, physical and psychological additions in addition to pressure from friends, relatives or in work.

Data analysis: Chi-squared tests were used to assess whether the proportion having a quit attempt or never try varied across the characteristic's levels. Multivariate logistic regression model was used to assess the independent effects of each of these variables on quit attempts as well as whether significant interactions occurred between these variables, ethnicity, and quit attempts.

Results

This study was carried out on 5000 subjects (3227 were Saudi and 1773 Non Saudi) from the total number there were (40.8%) were quit – attempt for one time or 2 to 4 times or more than 2 the rest of the subjects were current smokers without any attempt to stop smoking for any time. The percentage of subjects quit – attempt once was 19.2% and the percentages of subjects quit attempt from 2 - 4 times or more than 4 times were (12.9% and 8.7%) respectively (figure 1).

Table (1) shows the demographic characters of the subjects the mean age were (38.5 ± 19.73) and (44.2 ± 18.91) among Saudi and non – Saudi subjects respectively. Subjects with smoking parents show high percentages (54.4%) followed by that with smoking friends and smoking children (24.7% and 20.9% respectively). The mean number of cigarette smoked per day was (15 ± 8.35) in both groups. Subjects reported systemic diseases were (71.6%) including high blood pressure, diabetes, asthma and chest pain.

Table 1: Demographic characters of the participants

Characteristics	N (5000) n (%)
Race	
Saudi	3227 (64.5%)
Non Saudi	1773 (35.5%)
Smoking status	
Quit – attempt	2039 (40.8%)
Never- quit attempt	2961(59.2%)
Relatives smokers	
Parents	2720 (54.4%)
Children	1049 (20.9%)
Friends	1231 (24.7%)
Self-reported co-morbidities	
None	1420 (28.4%)
High BP	1766 (35.3%)
Diabetes	798 (16%)
Asthma & chest pain	1016 (20.3%)
Smoking average	
No of smoking per day	15 ± 8.35
Age average	
Saudi	38.5 ± 19.73
Non Saudi	44.2 ± 18.91

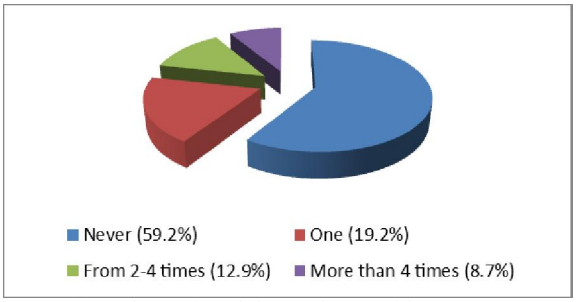

Figure (1): The quit trial numbers with percentages of participants

Figure (2) shows the major motivators addressed by the participant allow them to quit smoking, concern about health including the oral health and religious consideration showed higher percentages among Saudi people than Non – Saudi. Physical addiction was a major barrier which showed a high percentage among Saudi than Non – Saudi, while nicotine addiction or

psychological relief barriers to quit showed high percentages among Non- Saudi than Saudi people (figure 3).

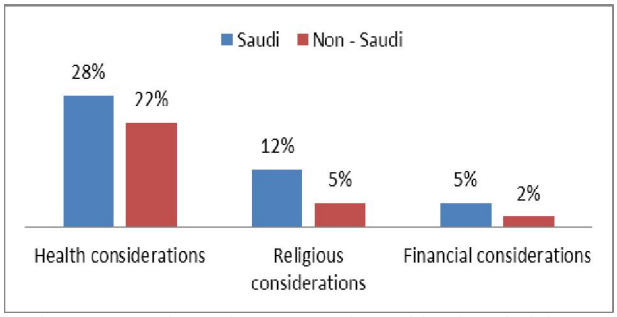

Figure (2): Main motivators to quit smoking by ethnicity

Table (2) shows the motivators of the quite attempt to return back smoking after each quit and to that never quit smoking, concern about heath including oral health constitute the major motivator to quit (50%) of the motivators followed by that is who are concern with health of the families or friends (18.5%). Islamic spiritual feeling or Islamic roles make (17%) of the subjects feeling that Hajj and staying in Makkah act as a motivator to stop smoking. Regarding the barriers to stop smoking, the major barriers detected were physical addiction and nicotine addiction (feel relax when smoke, love cigarette odor and More concentrated) (39% and 32.5%) respectively.

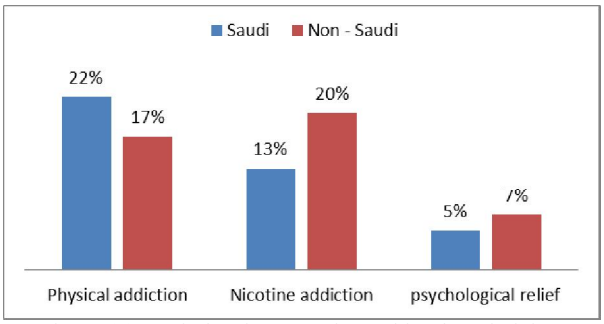

Figure (3): Main barriers to quit smoking by ethnicity

Table 2: Motives and barriers for quit

	Quit – attempt (2039)		Never – quit attempt (2961)		Total		OR	CI 95%
	n	%	n	%	n	%		
List of motivators								
Concern about health problems	917	45%	1628	55%	2545	50%	1.00	
Concern about family and friends' health problem	408	20%	503	17%	911	18.5%	2.35	1.81 – 2.72
Doctors advised me to quit	142	7%	237	8%	379	7.5%	3.54	2.35 – 3.64
Smoking costs too much	103	5%	89	3%	192	4%	3.71	2.45 – 3.82
Religious considerations	429	21%	385	13%	814	17%	2.22	1.97 – 2.99
Rules and regulations from work / environment	42	2%	119	4%	161	3%	3.86	2.77 – 3.92
Chi-square (X^2)	*P < 0.0001*		*P < 0.0001*		*P < 0.0001*		*P < 0.0001*	
List of barriers								
Physical addiction	775	38%	1184	40%	1959	39%	1.00	
Nicotine addiction	612	30%	1036	35%	1648	32.5%	1.32	1.12 – 1.89
Psychological relief	224	11%	355	12%	579	11.5%	1.89	1.38 – 2.11
Concern that they will gain weight	142	7%	148	5%	290	6%	2.12	1.33 – 2.73
Relatives / friends pressures	122	6%	119	4%	241	5%	2.13	1.37 – 2.65
Work pressures	103	5%	60	2%	163	3.5%	2.57	1.45 – 2.99
Others	61	3%	59	2%	120	2.5%	2.77	1.61 – 2.86
Chi-square (X^2)	*P < 0.0001*		*P < 0.0001*		*P < 0.0001*		*P < 0.0001*	

Discussion

The present study with a nationally representative sample was unique in its inclusion of individuals who were attempting to quit, in addition to those who continued to smoke, had never smoked, or had successfully quit, as well as its inclusion of a broad range of predictors.

Many smokers continue smoking not by choice but because they are addicted. A large part of this addiction arises from dependence on the nicotine delivered rapidly to the brain with each inhalation. [11]

This study found most correlates of quit attempts were similar across all racial groups. Results have shown that both quit attempt and never quit attempt agreed on the same motivators and barriers to quit smoking. It is reassuring to note that both valued "health" as the most important basis for smoking cessation.

Smoking cessation is difficult for people because it involves multiple factors that serve to maintain smoking behavior, such as physical addiction (e.g., effects of nicotine in the brain), psychological factors (e.g., learned habits), and environmental cues (e.g., peer smoking). [7,12-14]

Previous studies have shown that smoking behavior, such as the number of cigarettes smoked per day and age at initiation affect smoking cessation. [3, 15]

This study found that personal health concerns including oral health had the strongest association with increased likelihood of successful smoking cessation. Smokers may view their children as being different from other extrinsic motivators; because of the bond between parents and children. [16]

The present study indicates religiosity can act as a protective factor for smoking behavior. The efficacy of using religiosity as a means of quitting smoking has to be assessed on a larger sample size. The relationship of religiosity with, personality variables, coping behavior and motivation to quit smoking needs be assessed. Religious beliefs and practices can be used to promote the mental health of people. [16, 17]

Conclusion:

This study provides new insight into the types of motivators and barriers among different ethnicities in Saudi Arabia. The range of characteristics identified in this study, especially among attempting quitters, can help healthcare providers target the most effective smoking interventions.

References:

1. Kahende J, Malarcher A, Teplinskaya A and Asman K. Quit Attempt Correlates among Smokers by Race/Ethnicity. Int. J. Environ. Res. Public Health, 2011;8: 3871- 3888.
2. Lennox S. Determinants of outcome in smoking cessation. British Journal of General Practice, 1992; 42:247-252.
3. Baha, M., and Le Faou, A. L. Smokers' reasons for quitting in an anti-smoking social context. Public Health, 2010; 124: 225–231.
4. Grotvedt L and Stevem K. Association between age, gender and reasons for smoking cessation, Scandinavian Journal of Public Health 2005; 33: 72–76.
5. Benowitz L. Nicotine Addiction. New England Journal of Medicine 2010; 362 : 2295 – 2303.
6. Curry S, Grothaus L, McBride C. Reasons for quitting: intrinsic and extrinsic motivation for smoking cessation in a population-based sample of smokers. Addict Behav. 1997; 22:727–39.
7. Hymowitz N, Cummings KM, Hyland A, Lynn WR, Pechacek TF, Hartwell T. Predictors of smoking cessation in a cohort of adult smokers followed for five years. Tob Control 1997;6 (Suppl 2):57–62.
8. Trinidad R., Pe´rez-Stable J., White M., Sherry L. Emery L., Karen Messer K. A nationwide analysis of US racial/ethnic disparities in smoking behaviors, smoking cessation, and cessation-related factors. Am. J. Public Health 2011; 101: 699-706.
9. Lee W, Kahende J. Factors associated with successful smoking cessation in the United States. Am. J. Public Health 2007; 97:1503-1509.
10. Fould J, Gandhi K, Steinberg B, Richardson L., Williamson M., Burke M, Rhoads G. Factors Associated with quitting smoking at a tobacco dependence treatment clinic. Am. J. Health Behav. 2006;30: 400-441.
11. Foulds, J,Hooper M, Pletcher M, Okuyemi S. Do smokers of menthol cigarettes find it hard to quit smoking? Nicotine Tob. Res. 2010; 2:S102-S109.
12. Godtfredsen S, Prescott E, Osler M, Vestbo J. Predictors of smoking reduction and cessation in a cohort of Danish moderate and heavy smokers. Prev Med., 2001; 33:46–52.
13. Fagan P, Augustson E, Backinger C, O'Connell M, Vollinger R., Kaufman A, Gibson J. Quit attempts and intention to quit cigarette smoking among young adults in the United States. Am. J. Public Health 2007; 97:1412-1420.
14. King G, Polednak A, Bendel B, Vilsaint C, Nahata S. Disparities in smoking cessation between African Americans and Whites. Am. J. Public Health 2004; 94: 1965-1971.
15. Hopkins D, Fielding J. The Guide to community preventive service: Tobacco use prevention and control, reviews, recommendations, and expert commentary. Am. J. Prev. Med. 2001; 20 (Suppl 2): 1-88.
16. Joshi V, Suchin V, Lim J. Smoking Cessation: Barriers, Motivators and the Role of Physicians — A Survey of Physicians and Patients Proceedings of Singapore Healthcare. 2010; 19: 145 –152.
17. Gollust E, Schroeder A, Warner E. Helping smokers quit: Understanding the barriers to utilization of smoking cessation services. Milbank Q. 2008; 84: 601-627.

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