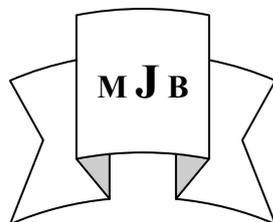


## Attitude to Smoking Cessation and Triggers to Relapse among Iraqi Male Smokers

Qayssar Joudah Fadheel

College of Pharmacy, University of Kufa, Iraq.



### Abstract

**Background:** Smoking is related to many diseases, and the relapse to smoking after cessation in Iraq is noticeable. We examined the attitudes of Iraqi male smokers regarding smoking cessation and reasons for relapse.

**Objective:** The aim of this study is to assess the ability of Iraqi male smokers to stop smoking and factors that lead to relapse after cessation.

**Method:** We interviewed 200 male smokers in Babylon town, Najaf town, Iraq who had tried to quit smoking at least once in order to identify reasons for quitting and situations triggering relapse.

**Results:** The most significant reported reasons for quitting included personal health (37.5%), the advice and example from other (22.5%), and family pressures to quit (12.5%). The most common factors triggering relapse were social situations (27.5%), feeling negative or down (17.5%) and times of being alone (10.0%).

**Conclusion:** Health and family concerns, personal factors, the influence of others and a lack of cessation resources were cited as salient factors concerning smoking cessation among male smokers in this study. Effective smoking control efforts in Iraq will require attention to these influences if Iraq is to curb its current smoking epidemic.

**Keywords:** Smoking, Social, Quit, Health, Family.

### الخلاصة

هناك علاقة وثيقة بين التدخين والعديد من الأمراض ولقد لوحظ عودة عدد من تاركي التدخين إلى التدخين في العراق لذلك تناولنا قابلية المدخنين العراقيين فيما يتعلق بالتوقف عن التدخين وأسباب العودة إليه . تهدف هذه الدراسة إلى معرفة مدى قابلية المدخنين لوقف التدخين ومعرفة العوامل التي تؤدي للعودة إلى التدخين . شملت هذه الدراسة محافظتي بابل والنجف الاشرف . تم مقابلة ٢٠٠ رجل مدخن حاول جزء منهم على الأقل مرة واحدة لوقف التدخين وذلك لمعرفة الأسباب التي دفعتهم إلى ترك التدخين وكذلك الظروف التي دفعتهم للعودة إليه . كان من أكثر الأسباب لوقف التدخين هي الاهتمام بصحة الجسم ( ٣٧,٥ % ) تليها النصيحة المقدمة من المحيطين واخذ المدخنين الآخرين مثالا للمعانة بعد طول فترة التدخين ( ٢٢,٥ %) وكذلك ( ١٢,٥ %) شمل الضغط الأسري لوقف التدخين . ومع ذلك كانت الأسباب الاجتماعية تشكل نسبة ( ٢٧,٥ %) للعودة إلى التدخين بعد التوقف عنه، تليها شعور تارك التدخين بالإحباط وعدم القدرة على مواصلة التقدم في طريق اللاتدخين تدفعه إلى العودة وينسب ( ١٧,٥ %) وأحيانا نسبة ( ١٠ %) هي الشعور بالوحدة وتوقف المساندة الأسرية مما يدفع بتارك التدخين للعودة . في هذه الدراسة وجد إن فقدان الاهتمام والنصيحة الأسرية وعدم اكتراث المدخن بصحته وصحة من حوله واخذ ظروف الحياة كذريعة للتدخين أو العودة إليه جعلت العراق منطقة وبائية ونحن بحاجة إلى جهود فعالة وعملقة للسيطرة على التدخين والعمل على تغيير جو العراق إلى جو صحي نقي.

### Introduction

Prevalence of tobacco consumption is reported by the World Health Organization (WHO), which focuses on smoking (not smokeless chewing tobacco) due

to reported data limitations. [1] Smoking has therefore been studied more extensively than any other form of consumption [2]. Smoking is generally five times higher among men than women,[3] however the gender

gap declines with younger age[4][5]. In developed countries smoking rates for men have peaked and have begun to decline, however for women they continue to climb [6]. Smoking prevalence has changed little since the mid-1990s (until which time it declined in English-speaking countries, which have all implemented tobacco control). In Western countries, smoking is more prevalent among populations with mental health problems, with alcohol and drug problems, among criminals, and among the homeless[7]. As of 2002, about twenty percent of young teens (13–15) smoke worldwide. 80,000 to 100,000 children begin smoking every day. Half of those who begin smoking in adolescent years are projected to go on to smoke for 15 to 20 years[8]. The World Health Organization (WHO) states that "Much of the disease burden and premature mortality attributable to tobacco use disproportionately affect the poor". Of the 1.22 billion smokers, 1 billion of them live in developing or transitional economies. Rates of smoking have leveled off or declined in the developed world.[9] In the developing world, tobacco consumption is rising by 3.4% per year as of 2002;[8] however, this figure could just be as high as the population growth. The WHO in 2004 projected 58.8 million deaths to occur globally,[10] from which 5.4 million are tobacco-attributed,[11] and 4.9 million as of 2007[12]. As of 2002, 70% of the deaths are in developing countries[12]. The following is from the table b of WHO Report on the Global Tobacco Epidemic[13]. From the initial survey the data is adjusted making it comparable between countries.[14] Because of this, however, it is not for inferring the prevalence within those countries (table a provides for this).[15] It contains 135 "Countries with recent

internationally comparable adjusted data", 18 "Countries with national data that are neither recent nor comparable internationally", and 41 "Countries with no data".[16] The data represents smoking any tobacco product at the time of the survey including daily and non-daily smoking; the error is with a 95% confidence interval (CI) [17]. In Iraq the percentage of male smokers is 25.8% and error 4.2%, female smokers 2.5% and error 1.65%.

### **Method**

Using a research protocol that was approved by the Department of Social Medicine at the Zhejiang University, face-to-face interviews about smoking cessation behavior were conducted by the first author (TY) and his staff of trained medical students in the homes of married men in Hangzhou City, capital of Zhejiang province in Eastern China. Male smokers were chosen because of the very high smoking rates among men over the age of 20 in Iraq compared to women. [19,21]. In addition, contact information for married men was readily accessible from city-identified households and we wished to identify the influence of family support for quitting. Households were identified by a multi-stage sampling procedure using a city-identified list of family households. First, two city-defined residential districts were chosen with high density family households. Second, from each city-defined neighbourhood area within these districts, blocks of apartment buildings were randomly selected using "Jiedao" (a sub-district neighbourhood administration). Third, from these apartment buildings, household units were randomly sampled by proportional sampling methods, using the serial numbers for each apartment unit. Interviews were only sought from married men from these units who were current smokers

("Is there a smoker in this family who has smoked every day for the last 6 months?"); if none were present, no interview took place. In rare cases where there was more than one male married smoker in the household, a coin was flipped to determine who was to be interviewed. In my research obtained an informed consent agreement from each smoker as a prerequisite for the interview. Interviews were conducted in private in a separate room and took only 30 minutes to complete. A reliability coefficient of 0.96 was obtained when a random 10% of the survey responses were checked by telephone. This process identified two samples: a) smokers who had never tried to quit, and b) smokers who had tried to quit and relapsed. While all these respondents completed face-to-face interviews, the attempted quitters provided additional data related to situations and reasons for relapse. The interview survey included items tapping the following themes: a) socio-demographics; b) current smoking status; c) smoking history; d) number of past quit attempts and length of abstinence; e) reasons for quitting; and f) situations that triggered relapse. From the responses we were able to rank reasons for quitting and relapse according to frequency.

### **Results**

200 eligible participants identified and called, of which 110 identified themselves as current smokers. Based upon these results, we calculated an estimated smoking prevalence rate among our total sample of male smokers as 55% (110/200). Of this sample, 40 (36.4%) indicated they had tried to quit smoking at least once in their lifetime ("attempted quitters"), and the remaining 70(63.6%) smokers indicated that they had never tried to quit. There was no significant difference between attempted quitters versus those who had not tried to quit in terms of age, years of education, occupation, smoking behaviors, duration of smoking, amount smoked, and thoughts about quitting. Nor were there any between-group differences in terms of self-efficacy for quitting ("how would you describe your self-confidence in successfully quitting smoking") and perceived barriers to quitting. The two groups naturally differed only in their quitting intentions, with the percent wanting to quit (36.3%) being significantly lower among those who made no attempt to quit (63.4%). In Table 1 we include characteristics of our study sample. Complete data were obtained from 40 attempted quitters. The majority started smoking after age 20, and almost 65% smoked 20 or more cigarettes per day.

**Table 1** Demographic and smoking characteristics of relapsed male smokers

Characteristic	% of sample (N = 40)
<b>Age</b>	
< 30 years	8.6
30 – 39 years	40.4
40 – 49 years	29.8
50 years and older	21.2
<b>Education</b>	
Completed elementary school	28.6
Completed junior high & high school	55.8
College and above	15.6
<b>Occupation</b>	
Management	22.48
Science/teaching	19.3
Enterprise clerk	34.7
Commercial clerk	16.2
Other	7.0
<b>Individual Income per day (Dollars)</b>	
< 15	48.9
15 – 24	32.8
25 – 34	4.0
35 – 44	3.6
45 – 54	4.5
55 and more	6.2
<b>Age of smoking initiation</b>	
< 20 years	33.7
20 – 29 years	41.4
30 years and older	24.9
<b>Cigarettes smoked per day</b>	
< 10 cigarettes	15.2
10 – 19 cigarettes	19.8
20 or more cigarettes	65.0

Notwithstanding evidence of a strong desire to quit amongst our relapsed smokers (45.3%), or those wanting to

try to quit (36.3%), overall feelings of self-efficacy in being able to become an ex-smoker were low, with only

15.1% reporting that they were "certain" that they could quit. Evidence of this lack of self efficacy in remaining an ex-smoker was reflected in an analysis of the duration of the

quitting episode. At the most recent attempt to quit, two weeks or less was the maximum smoke free period for half the sample (Table 2)

**Table 2** Length of abstinence in the most recent quit attempt

	N	% of sample (N = 40)
< 2 weeks	11	27.5
2 weeks	7	17.5
1 month	4	10.0
2 months	3	7.5
3 months	6	15.0
4 months	9	22.5
Total	40	100.0

Primary reasons for attempting to quit were found to be related to health concerns (for self and family), costs, advice or examples of successful quitting from others, and family pressures to quit (Table 3). More than

half of respondents cited restrictions due to health concern and advice plus example from other as a reason to quit. When asked about their most frequently used methods for quitting.

**Table 3** Reasons given for attempting to quit

	N	% of sample (N = 40)
Health concern (for self and family)	15	37.5
Cost	2	5.0
Family pressure	5	12.5
Advice and example from others	9	22.5
Restrictions on smoking (in workplace, on public transportation, at home)	3	7.5
Social stigma	6	15.0

Participants in the study were asked a series of questions about situations or feelings that influenced or rekindled the desire to smoke during their period of

their abstinence). Attempted quitters were asked to rank the most influential factor that was a trigger to smoke ( i.e., a temptation to slip).

**Table 4** Most influential trigger to smoke during a period of abstinence

	N	% of sample (N = 40)
In social situations (e.g., in the company of other smokers, etc)	13	32.5
After a meal	0	0.0
When feeling negative, or down	6	15.0
When feeling positive, or elated	2	5.0
When feeling stressed	7	17.5
When feeling tired	3	7.5
During entertainment (Playing cards for money, watching sport, etc.)	5	12.5
While reading or writing	0	0.0
When alone	4	10.0
In the presence of alcohol	0	0.0

From a range of items respondents were asked what kinds of situations caused them to relapse. Social situations (often involving other smokers) was highest on the list of frequent responses (27.5%), but after a

meal (7.5%) was less important than being alone (10.0%), and high or low emotional states (17.5% respectively) (Table 5).

**Table 5** Situations causing relapse among Iraqi male smoker

	N	% of sample (N = 40)
In social situations (e.g., in the company of other smokers, etc)	11	27.5
When feeling negative, or down	7	17.5
When feeling positive, or elated	7	17.5
When alone	4	10.0
After a meal	3	7.5
During entertainment (Playing cards for money, playing Majiang, watching sport, etc.)	2	5.0
While reading or writing	1	2.5
When feeling tired	0	0
When feeling stressed	5	12.5
In the presence of alcohol	0	0.0

## **Discussion**

This report describes results from a household survey of tobacco cessation and relapse related attitudes and behaviors from a representative sample of male smokers living in Babylon, Najaf an urban city in middle Iraq. The regional variation in tobacco use in Iraq has been documented [19]. with prevalence rates in rural areas higher than the national average for men smokers (69.4% versus 61%) [21,22]. However, in eastern China where our study was conducted, smoking rates are lower than in other areas, and we feel much of our data is representative of this area of Iraq. For example, a recent survey by Yang in 2002 [23]. found that the smoking rate for men in Hangzhou was 42.9%. Further, we wish to point out that the WHO definition of smoking (daily smoking for 6 months) used in our survey differs from the 1996 National Survey (smoking at least one cigarette daily) [19]. However, given these differences, our data is similar to National Survey data in terms of the relatively late uptake of smoking after age 20 for most men, the high smoking rates, the proportion who have tried to quit (36.4% versus 63.6%) and the low rate of successful lifetime quitters (2.3% nationally versus 0%) in our study. Our survey interviews identified similar reasons for relapse among our sample of Iraqi male smokers to those that have been reported for the broad category of addictive behaviors [24] and smoking cessation [20] in western societies. For example, we identified that relapse was associated with feelings of low self-control, negative stress, times of high elation, and social situations involving other smokers. In addition, we found few differences between triggers or cues to smoke, and situations that caused a person to relapse fully. The relatively short periods of abstinence reported by our

respondents underscores the difficulties faced by smokers who want to quit in Iraq. While the absence of available cessation methods was cited as a reason for relapse by only 17% of our sample, it was more likely related to situations where high positive feelings were associated with social situations (e.g., winning at cards). From our data, it would appear that social situations and peer influences are important barriers to smoking cessation in this Iraqi population. Perhaps most central to Iraqi culture is the value of family to the individual as well as to Iraqi society. Family values emphasize the collective quality in the nature of the individual's life and behavior, and a strong sense of obligation and responsibility to one's family is cherished as a virtue [25]. In this context, smoking may be perceived as a threat to the health and financial concerns of a family. Yang and Miao [26] recognized the important role of family in designing an effective smoking cessation program based on spouse support. Family and peer influences have been found to be related to smoking in Iraqi [25,27,28]. Advice about quitting and examples from others outside the family was cited as second most influential reason to attempt to quit in this study. This evidence suggests that home and family support as well as social support from others may represent important targets for effective cessation program delivery. Cost was a less frequently reported reason for quitting. Iraqi culture also places high value on individual "personal power" and considers this as perhaps the most important personal quality, compared to western values, which emphasize appearance, money, and/or prestige among a host of valued personal attributes [29,30]. Handling social interaction and personal relationships well is extremely important and is a

foundation of the commercial enterprise and business acumen so endemic in Iraqi society. Traditionally, offering people cigarettes has been a custom to enhance personal friendship and relationships, and Chinese people have traditionally shared cigarettes with each other and treated guests with cigarettes. With the rapid rates of economic development in Iraq during the last 20 years, business relationships and social contacts have considerably increased the rates of smoking [18,31,32]. This places a large burden on individual self-efficacy for quitting, and refusing offers and temptations to slip within a pro-smoking social milieu. By regarding public smoking as socially acceptable or desirable, the social milieu in China contains considerable barriers to the promotion of effective smoking cessation opportunities. In addition to being tobacco consumers, China is one of the world's largest producers of tobacco products so that tobacco is widely available [32]. The low desire to quit among smokers suggests a stronger public health agenda to focus more upon making smoking socially unnecessary and/or unacceptable [33]. While at the outset this may appear a forlorn utopian dream, evaluations from western style intervention programs with Chinese youth have shown promise and potential [34]. In addition, cessation efforts targeted at parents and adult smokers could help to reduce the adoption of smoking among future generations [35].

### **Conclusion**

The results of this study help to fill a void in the literature with regard to identifying important psychosocial issues related to cessation and smoking relapse among male Iraqi smokers in a large city. Notwithstanding the relatively encouraging finding that a

modest proportion of smokers have a desire to quit, the high rate of recidivism is cause for concern. By highlighting the salient challenges facing attempted quitters in Iraq both from a situational/cultural perspective as well as on a personal level, our data may provide important information for the design of smoking cessation programs and/or the settings in which they might be delivered. Our respondents identified a lack of cessation resources available for well-intentioned quitters, but this explanation may have masked a more personal sense of failure to exercise sufficient will power at a moment of social pressure to light up. In addition, the perceived lack of cessation resources may have been due to a paucity of tax supported public health agencies and environmental support systems (e.g., cigarette taxes, smoke free ordinances) for smoking cessation in Iraq. Compared to most western societies where public health promotion initiatives and revenue from tobacco sales have provided educational, fiscal and regulatory support to curb smoking attitudes and behaviors, public health efforts in Iraqi society have not yet succeeded in setting a social agenda that supports the reduction of tobacco use.

### **References**

1. "Prevalence of current tobacco use among adults aged  $\geq 15$  years (percentage)". World Health Organization. Retrieved 2009- 01-02.
2. "Mayo report on addressing the worldwide tobacco epidemic through effective, evidence-based treatment". World Health Organization. pp. 2. Retrieved 2009-01-02.
3. a b Guindon, G. Emmanuel; Boisclair, David (2003). Past, current and future trends in tobacco use. Washington DC: The International Bank for Reconstruction and

- Development / The World Bank. pp. 13–16. Retrieved 2009-03-22.
4. The World Health Organization, and the Institute for Global Tobacco Control, Johns Hopkins School of Public Health (2001). "Women and the Tobacco Epidemic: Challenges for the 21st Century" (PDF). World Health Organization. pp. 5–6. Retrieved 2009-01-02.
  5. "Surgeon General's Report-Women and Smoking". Centers for Disease Control and Prevention. 2001. p. 47. Retrieved 2009-01-03.[dead link]
  6. Peto, Richard; Lopez, Alan D; Boreham, Jillian; Thun, Michael (2006) (PDF). Mortality from Smoking in Developed Countries 1950-2000: indirect estimates from national vital statistics. Oxford University Press. p. 9. Retrieved 2009-03-22.
  7. West, Robert and Shiffman, Saul (2007). Fast Facts: Smoking Cessation. Health Press Ltd.. pp. 20, 26. ISBN 978-1-903734-98-8.
  8. a b "WHO/WPRO-Smoking Statistics". World Health Organization Regional Office for the Western Pacific. 2002-05-28. Retrieved 2009-01-01.
  9. Centers for Disease Control and Prevention (CDC) (2009). "Cigarette smoking among adults and trends in smoking cessation - United States, 2008" (Full free text). *MMWR. Morbidity and mortality weekly report* 58 (44): 1227–1232. PMID 19910909. edit
  10. GBD 2008, p. 8
  11. GBD 2008, p. 23
  12. a b "WHO/WPRO-Tobacco Fact sheet". World Health Organization Regional Office for the Western Pacific. 2007-05-29. Retrieved 2009-01-01.
  13. WHO Report on the Global Tobacco Epidemic 2008, pp.278–287.
  14. WHO Report on the Global Tobacco Epidemic 2008, p.67.
  15. WHO Report on the Global Tobacco Epidemic 2008, p.287.
  16. WHO Report on the Global Tobacco Epidemic 2008, p.68.
  17. WHO Report on the Global Tobacco Epidemic 2008, p.268–287
  18. ACS The 12th World Conference on Tobacco or Health: Tobacco control country profiles. 2nd. American Cancer Society; 2003.
  19. Yang G, Ma J, Chen A, Zhang Y, Samet JM, Taylor CE, Becker K. Smoking cessation in China: Findings from the 1996 National Prevalence Survey. *Tob Control*. 2001;10:170–174. doi: 10.1136/tc.10.2.170. [PMC free article] [PubMed] [Cross Ref]
  20. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz ER, Heyman RB, Jaen CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence Clinical practice guidelines*. Rockville: MD, U.S. Department of Health and Human Services, Public Health Service; 2000.
  21. Gu D, Wu X, Reynolds K, Duan X, Xin X, Reynolds RF, Whelton PK, He J. Cigarette smoking and exposure to environmental tobacco smoke in China: The international collaborative study of cardiovascular disease in Asia. *Am J Public Health*. 2004;94:1972–1976. [PMC free article] [PubMed]
  22. Chen X, Li X, Stanton B, Fang X, Lin D, Cole M, Liu H, Yang H. Cigarette smoking among rural-to-urban migrants in Beijing, China. *Prev Med*. 2004;39:666–673. doi: 10.1016/j.ypmed.2004.02.033. [PubMed] [Cross Ref]
  23. Yang TZ. Study on stress of urban residents during social transition. *Chinese Epidemiology*. 2002;23:473–475.
  24. Marlatt GA. Situational determinants of relapse and skill-

- training interventions. In: Marlatt GA and Gordon JR, editor. Relapse prevention: Maintenance strategies in the treatment of addictive behaviors. New York, Guilford; 1985. pp. 71–127.
25. Shakib S, Zheng H, Johnson CA, Chen X, Sun P, Palmer PH, Yan L, Jie G, Unger JB. Family characteristics and smoking among urban and rural adolescents living in China. *Prev Med.* 2005;40:83–91. doi: 10.1016/j.ypmed.2004.05.029. [PubMed] [Cross Ref]
26. Yang TZ, Miao B. Evaluation of the smoking cessation program of "Wives' help". *Chinese Social Medicine.* 1993. pp. 47–48.
27. Unger JB, Yan L, Shakib S, Rohrbach LA, Chen X, Qian G, Chou CP, Jianguo S, Azen S, Zheng H, Johnson CA. Peer influences and access to cigarettes as correlates of adolescent smoking: A cross-cultural comparison of Wuhan, China, and California. *Prev Med.* 2002;34:476–484. doi: 10.1006/pmed.2001.0996. [PubMed] [Cross Ref]
28. Trinidad DR, Chou CP, Unger JB, Johnson CA, Li Y. Family harmony as a protective factor against adolescent tobacco and alcohol use in Wuhan, China. *Subst Use Misuse.* 2003;38:1159–1171. doi: 10.1081/JA-120017656. [PubMed] [Cross Ref]
29. Tseng WS, Wu DYH. Chinese culture and mental health. New York, Academic Press; 1985.
30. Yang TZ. Health education theory and method. Hangzhou, Zhejiang University Press; 2004. pp. 102–108.
31. WHO World health report. Geneva, World Health Organization; 1999. Combating the tobacco epidemic.
32. Yang G, Fan L, Tan J, Qi G, Zhang Y, Samet JM, Taylor CE, Becker K, Xu J. Smoking in China: Findings of the 1996 National Prevalence Survey. *JAMA.* 1999;282:1247–1253. doi: 10.1001/jama.282.13.1247. [PubMed] [Cross Ref]
33. Pan Z. Socioeconomic predictors of smoking and smoking frequency in urban China: Evidence of smoking as a social function. *Health Promot Int.* 2004;19:309–315. doi: 10.1093/heapro/dah304. [PubMed] [Cross Ref]
34. Zheng H, Sussman S, Chen X, Wang Y, Xia J, Gong J, Liu C, Shan J, Unger J, Johnson CA. Project EX--a teen smoking cessation initial study in Wuhan, China. *Addict Behav.* 2004;29:1725–1733. doi: 10.1016/j.addbeh. 2004. 03.035. [PubMed] [Cross Ref]
35. Hesketh T, Ding QJ, Tomkins A. Smoking among youths in China. *Am J Public Health.* 2001;91:1653–1655. [PMC free article] [PubMed]