

# Tobacco use in Tunisia: behaviour and awareness

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**Objective** To assess tobacco use and the awareness of and attitudes towards tobacco and its control in the adult population of Tunisia.

**Methods** A cross-sectional study was conducted in 1996 of a representative national sample of 5696 subjects aged 25 and over. Data were collected by means of a questionnaire in Arabic.

**Findings** Tobacco use was reported by 30.4% of the respondents, of whom 24.6% smoked cigarettes and 5.8% consumed traditional tobacco, i.e. snuff, chewing tobacco and/or water pipe tobacco. Whereas 55.6% of men used tobacco, only 5.2% of women did so. Among men the proportion of tobacco users diminished with age as the rate of cessation increased. Among women, smoking peaked in the 35–54 age group. The proportion of men consuming traditional tobacco alone increased from 2.4% in the 25–34 age group to 20.4% in the 55+ age group; the corresponding values for women were 0.1% and 14.3%. Tobacco use was more widespread in rural than in urban areas and was relatively high among poorly educated men from economically deprived backgrounds.

The use of tobacco was believed to be harmful to health by 98.6% of the respondents. Over 90% of the interviewees were aware that tobacco played a part in the development of heart disease. However, there were some gaps in awareness. A fear of cancer was expressed by 85% of the respondents, whereas only 5.6% were fearful of accidents.

**Conclusions** Informational and educational campaigns relating to tobacco control should be directed at individuals and communities, taking into account the gaps in awareness of the effects of tobacco on health.

**Keywords** *English MeSH:* Smoking/epidemiology; Tobacco, Smokeless; Knowledge, attitudes, practice; Education; Sex factors; Age factor; Cross-sectional studies; Tunisia (*source: MeSH, NLM*).

**Mots clés** Tabagisme/épidémiologie; Tabac à priser et à chiquer; Connaissance, attitude, pratique; Enseignement et éducation; Facteur sexuel; Facteur âge; Etude section efficace; Tunisie (*source: MeSH, INSERM*).

**Palabras clave** Tabaquismo/epidemiología; Tabaco sin humo; Conocimientos, actitudes y práctica; Educación; Factores sexuales; Factores de edad; Estudios transversales; Túnez (*fuente: DeCS, BIREME*).

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Voir page 355 le résumé en français. En la página 355 figura un resumen en español.

## Introduction

Tobacco is the major cause of preventable mortality, accounting for three million deaths annually, 70% of them in the developed countries (1, 2). WHO has estimated the number of smokers to be 1.1 billion (3), a third of the world's population aged 15 and over. Of these, 700 million men and 100 million women are in the developing countries, where 47% of men and 7% of women smoke. In the industrialized countries there are 200 million male smokers and 100 million female smokers, corresponding to prevalences of 42% and 24% respectively.

In recent years the prevalence of smoking has decreased in many industrialized countries (4). In developing countries, however, there has been a substantial rise in the number of young adults taking up smoking and in the per capita consumption of tobacco (5). The liberalization of trade has contributed to a growth in tobacco consumption in low-income and middle-income countries. This is compounded by the effects of smuggling, which tends to be more common in low-income countries than in wealthier countries, and benefits the tobacco manufacturers (6).

Studies conducted over the last 20 years or so show that the tobacco epidemic is firmly established in Tunisia, where the

use of tobacco is especially prevalent among men. However, most of the published work on the subject in this country has related to specific groups (7–11). In order to take effective action it is necessary to know the magnitude of the problem at national level. Our study, part of a survey on the prevalence of chronic obstructive pulmonary disease conducted in a sample of the Tunisian population, was designed to assess the prevalence of tobacco use in the adult population and the awareness and attitudes underpinning it.

## Methods

### Population and sampling

The data were taken from a cross-sectional survey on the prevalence of chronic obstructive pulmonary disease carried out in 1996 under the aegis of the *Ligue Nationale Contre la Tuberculose et les Maladies Respiratoires*, the *Institut National de la Santé Publique* and the *Société Tunisienne d'Epidémiologie et de Médecine Préventive*. The survey was conducted on a representative national sample of 5696 subjects aged 25 and over who were resident in Tunisia.

Two-stage cluster sampling was used. In the first stage a governorate was randomly selected in each of the country's

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seven major socioeconomic regions. In the second stage, and following stratification into urban areas with a population of 100 000 or more, other urban areas and rural areas, districts were selected at random in proportion to the number of households per district. All households in the selected districts were surveyed.

## Data collection

The data were collected by means of a questionnaire (see Box 1) in the local Arabic dialect, administered by four field workers. Information was obtained on the following matters.

- Sociodemographic status: age, gender, level of education, socioprofessional category, type of social welfare cover, place of residence.
- Passive and active tobacco use, specifying age of initiation, average quantity of tobacco consumed (cigarette, pipe, chewing tobacco, snuff, water pipe tobacco), age of cessation for ex-smokers, and whether inhalation was practised.
- Awareness of and attitudes to tobacco and tobacco control measures.

The field workers were interns who had completed their medical training and were working on doctoral theses. They had received training on the objectives of the survey, the sampling methods and the administration of the questionnaire.

## Data analysis

In order to facilitate the analysis of the data a distinction was made between different categories of behaviour. The "smokers" category included current smokers who were smoking daily and had been doing so for at least the previous month, and ex-smokers who had smoked regularly for a year but were no longer smoking. In the latter connection, regular smoking was defined as the consumption of at least 20 packets of cigarettes or 360 g of tobacco altogether or at least one cigarette per day or one cigar per week for a year. A heavy smoker was defined as someone who smoked 20 cigarettes or more a day.

Another category comprised subjects who had never smoked but were regular consumers of traditional tobacco, i.e. water pipe tobacco and/or snuff. Non-consumers of tobacco were defined as persons who had never smoked or had consumed fewer than 20 packets of cigarettes or 360 g of tobacco in their lifetime, or less than one cigarette per day or one cigar per week for a year.

The degree of overall exposure was assessed using a conventional indicator of the number of packet-years, obtained by multiplying the number of packets of 20 cigarettes consumed in a year by the number of years of cigarette consumption.

The data were captured by means of Epi Info Version 6 software. Frequencies and percentages were calculated by using SPSS/PC+ Version 4. The percentages were compared with the help of the  $\chi^2$  test, and the averages by means of Student's t-test. The significance threshold was 5%. We used the multiple logistic regression model to identify the factors linked to attempts to quit smoking. Thirty-one dossiers, 0.6% of the total, were eliminated because of unusable data.

## Results

### Tobacco consumption

Tobacco use was reported in 30.4% of the respondents (Table 1). The overall proportion of ex-smokers was 4.4%, the

### Box 1. Questionnaire on tobacco use and related matters

- Q1 Do you smoke or have you ever smoked regularly for at least a year?  
1 – Yes  
2 – No

(Yes means 20 packets of cigarettes or 360 g of tobacco during a lifetime, or at least one cigarette a day or one cigar a week for a year).  
If Yes:

- Q2 What age were you when you started smoking?

- Q3 Do you smoke now (in the past month)?

- 1 – Yes  
2 – No

- Q4 How much do you smoke at the moment?

- 1 – Cigarettes per day:  
2 – Cigarillos per day:  
3 – Cigars per day:  
4 – Pipe tobacco (in grammes) per day:  
5 – Chewing tobacco or snuff (10 g sachets) per week:  
6 – Water pipe tobacco (in grammes) per week:

- Q5 Have you tried to stop using tobacco or to cut down?

- Q6 What age were you when you tried to stop or cut down?

- Q7 While you were smoking, and before you stopped or cut down, about how much did you smoke?

- 1 – Cigarettes per day:  
2 – Cigarillos per day:  
3 – Cigars per day:  
4 – Pipe tobacco (in grammes) per day:  
5 – Chewing tobacco or snuff (10 g sachets) per week:  
6 – Water pipe tobacco (in grammes) per week:

- Q8 Did you stop or cut down because of respiratory disease?

- Q9 Did your father smoke regularly during any period of your childhood?

- Q10 Did your mother smoke regularly during any period of your childhood?

- Q11 Which of the following illnesses are caused by tobacco use?

- 1 – Diabetes  
2 – Cancer  
3 – Tuberculosis  
4 – Heart diseases  
5 – Influenza  
6 – Respiratory diseases

- Q12 Which of the following do you fear most?

- 1 – Road accidents  
2 – Diabetes  
3 – Tuberculosis  
4 – Cancer  
5 – Influenza  
6 – Heart diseases  
7 – Tobacco-related diseases  
8 – Respiratory diseases

values for men and women being 8% and 0.8% respectively, i.e. tobacco use was ten times higher in men than in women.

Current smokers made up 24.6% of the sample; 5.8% consumed the traditional tobacco products of chewing tobacco, snuff and/or water pipe tobacco exclusively. Among men the proportion of current smokers decreased with age, whereas among women it peaked in the 35–54 age group. However, for both sexes the proportion consuming traditional tobacco exclusively increased with age. For men it rose from 2.4% in the 25–34 age group to 20.4% in those aged 55 and over; for women the corresponding increase was from 0.1% to

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14.3%. The rate of cessation increased with age for men, rising from 4.2% for those aged 25–34 to 12.4% after the age of 55.

Tobacco use was more widespread in rural than in urban areas. The consumption of traditional tobacco was higher for both sexes in rural areas. Tobacco consumption among rural women was almost exclusively confined to traditional products (Table 2).

Among men, tobacco consumption declined with increasing educational level ( $P<0.001$ ); manual workers and service professional smoked more than members of other socioprofessional categories ( $P<0.001$ ) (Table 2).

The percentage of smokers was higher among persons with a father or mother who had smoked than among other people (Table 3).

The average age at which respondents began using tobacco was  $19.5 \pm 5.2$  years in men and  $23.9 \pm 11.2$  years in women ( $P<0.05$ ). It increased significantly with current age ( $P<0.001$ ) (Table 4).

The average quantity of cigarettes consumed per day was  $17.7 \pm 9.0$ . There were no significant differences associated with sex, age, level of education or environment. The percentage of persons smoking 20 or more cigarettes a day was 66.1% for men and 46.5% for women (Fig. 1). The mean number of packet-years accumulated by cigarette smokers was  $8.6 \pm 16.7$ . There was no significant difference between the sexes in the number of packet-years.

With regard to the frequency of cessation of tobacco use, 9.4% of respondents had made at least one attempt to stop smoking or to reduce the amount of smoking. Using the multiple logistic regression model, we found that age, environment and educational level were the major determining factors in attempts to quit. Respondents over the age of 45 were more likely to try to quit than those under 34 (odds ratio = 4.6; 95% confidence interval = 2.3–9.1;  $P<0.001$ ); city dwellers were more likely to quit than rural dwellers (odds ratio = 4.2; 95% confidence interval = 2.6–6.6;  $P<0.001$ ); and

Table 1. Tobacco use in Tunisia, 1996

	Cigarette smokers (%)	Ex-smokers (%)	Consumers of traditional tobacco only (%)	Non-consumers of tobacco (%)	Numbers	Probability
<b>Men</b>						
25–34	58.8%	4.2%	2.4%	34.6%	965	$P<0.001$
35–44	49.8%	6.9%	4.7%	38.5%	654	
45–54	43.4%	11.0%	5.7%	40.0%	493	
55 +	33.5%	12.4%	20.4%	33.8%	678	
Total (men)	47.8%	8.0%	7.9%	36.3%	2790	
<b>Women</b>						
25–34	0.9%	0.6%	0.10%	98.4%	1000	$P<0.01^a$
35–44	1.9%	0.3%	0.4%	97.4%	741	
45–54	2.2%	0.7%	2.5%	94.6%	446	
55+	1.6%	1.9%	14.3%	82.2%	623	
Total (women)	1.5%	0.8%	3.7%	94.0%	2810	
Total both sexes (men + women)	24.6%	4.4%	5.8%	65.2%	5600	

<sup>a</sup> In order to obtain a valid  $\chi^2$  the female age groups 45–54 and 55+ were merged.

Table 2. Tobacco use by environment, educational level and occupation, Tunisia, 1996

	Environment			Educational level				Occupation					
	Rural (%)	Urban (%)	Numbers (%)	Illiterate (%)	Primary (%)	Secondary (%)	Tertiary (%)	Numbers (%)	Unemployed (%)	Manual workers, service personnel (%)	Employees, middle management (%)	Employers, senior management (%)	Numbers (%)
<b>Men</b>													
Cigarette smokers	48.7%	47.2%	1334	38.3%	53.7%	52.4%	36.5%	1328	34.0%	54.4%	48.3%	43.5%	1334
Ex-smokers	6.2%	9.3%	224	8.8%	7.1%	9.0%	7.1%	224	10.6%	6.9%	8.4%	8.1%	223
Consumers of traditional tobacco only	14.3%	3.4%	220	18.0%	4.8%	2.6%	3.6%	219	13.9%	7.0%	2.5%	6.9%	220
Non-consumers of tobacco	30.9%	40.1%	1012	34.9%	34.4%	36.0%	52.8%	1007	41.5%	31.7%	40.8%	41.5%	1011
Total			2790					2778					2788
Probability	$P<0.001$			$P<0.001$				$P<0.001$					43
<b>Women</b>													
Cigarette smokers	0.7%	2.1%	43	0.8%	1.8%	3.4%	2.6%	42	1.0%	2.8%	3.1%	5.1%	23
Ex-smokers	0.8%	0.9%	23	0.9%	0.6%	1.0%	1.3%	23	0.8%	0.8%	1.0%	1.3%	23
Consumers of traditional tobacco only	6.0%	22.1%	104	6.5%	0.7%			104	3.8%	3.9%	1.0%	2.6%	104
Non-consumers	92.6%	94.9%	2640	91.8%	96.8%	95.6%	96.2%	2623	94.4%	92.5%	94.8%	91.0%	2640
Total			2810					2792					2810
Probability	$P<0.001$			–				–					

Table 3. Respondents' tobacco use as a function of parental use, Tunisia, 1996

		Cigarette smokers	Ex-smokers	Consumers of traditional tobacco only	Non-consumers of tobacco	Total	Probability
Father a smoker	Yes	33.3%	6.1%	2.9%	57.8%	5592	$P < 0.001$
	No	21.5%	3.6%	6.4%	68.4%		
	Not known	30.7%	9.8%	14.1%	45.4%		
	Total number	1377	247	324	3644		
Mother a smoker	Yes	45.5%	15.9%	5.6%	38.6%	5595	—
	No	24.5%	4.3%	40.0%	65.6%		
	Not known	17.1%	2.9%	40.0%	40.0%		
	Total number	1377	247	324	3647		

Table 4. Average age at which tobacco use began by gender, age group and environment, Tunisia, 1996

	Average age in years (standard deviation)	Numbers	Probability
<b>Gender</b>			
Men	19.5 (5.2)	1800	$P < 0.001$
Women	23.8 (11.8)	662	
<b>Current age</b>			
25–34	18.2 (3.3)	662	$P < 0.001$
35–44	19.0 (3.9)	422	
45–54	19.6 (4.8)	326	
55–64	20.7 (5.7)	247	
65+	23.8 (10.7)	238	
<b>Environment</b>			
Rural	20.1 (6.1)	900	Not significant
Urban	19.6 (6.1)	1086	
Total	19.9 (6.1)	1986	

people educated to university level were more likely to try to quit than those who were illiterate (odds ratio = 2.8; 95% confidence interval = 1.3–6.0;  $P < 0.01$ ). The development of respiratory symptoms was the reason for 23.7% of attempts to stop smoking. The average age at which respondents attempted to stop using tobacco was  $42.7 \pm 13.5$  years.

### Attitudes and awareness concerning tobacco use and its health effects

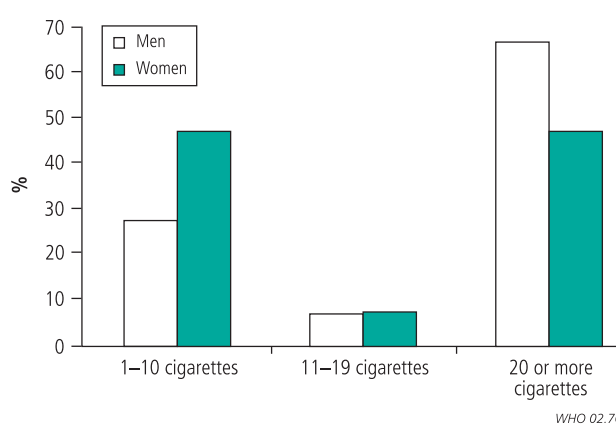
Of the individuals surveyed, 98.6% believed that the use of tobacco was damaging to health. Over 90% of the respondents cited tobacco as a factor in the development of lung cancer, respiratory diseases and heart diseases (Fig. 2). However, there were certain gaps in awareness. For example, 77.5% of the respondents associated tobacco with tuberculosis.

People were most fearful of cancer (85%), far more so than of road accidents (5.6%) (Fig. 3). The risk of other health effects attributable to tobacco use (respiratory diseases, cardiovascular diseases) was seen as minor.

### Discussion

Previous data on tobacco consumption in Tunisia focused on specific populations, e.g. regional populations (a semiurban community in the Tunisian Sahel (10) and the governorate of Ariana in Greater Tunis (11)), or on particular groups such as

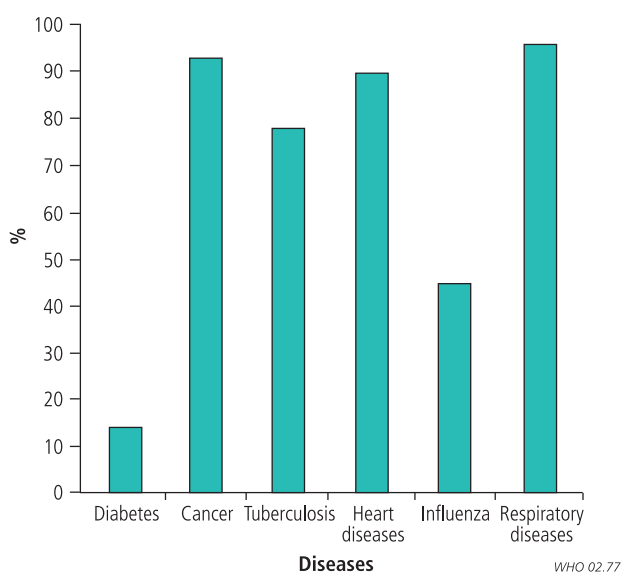
Fig. 1. Proportional distribution of cigarette smokers by average number of cigarettes smoked daily, Tunisia, 1996



health professionals (12) and medical students (13). The study carried out in the semiurban community in the Tunisian Sahel reported prevalences of 66% and 0.6% among men and women respectively; the Ariana study found prevalences of 55% in men and 5.3% in women. According to a longitudinal study of a cohort of 257 Tunisian medical students (13), the prevalence of smoking among males rose from 37% in the first year of their course to 55.6% when it ended; among females the corresponding increase was from 7.3% to 14.4%. Smoking was reported in just over half of all health professionals other than medical students: 59.2% of medical staff and 43.8% of administrative staff were smokers (12). A comparison of our data with those obtained in other countries in the region, particularly Mediterranean countries (14), reveals certain similarities. The use of tobacco in most countries is more prevalent among men than among women. The proportion of men who smoke in the Middle Eastern and Mediterranean countries ranges from 20% in Islamic Republic of Iran to 63% in Turkey. In Greece and Lebanon over 30% of women smoke; in Catalonia (Spain), Italy, Syria, and Turkey, the figure is 20% or more, while in the remaining countries of the region the proportion is below 10%; in Egypt and Islamic Republic of Iran, 5% or fewer women use tobacco. In all of these countries, manufactured cigarettes are the most common form in which tobacco is consumed (14).

In the present study the level of tobacco use in men was in inverse proportion to their educational level: men educated to degree level smoked less than those of lower educational level. Furthermore, employers and senior managers smoked

Fig. 2. Awareness of the adverse affects of tobacco, Tunisia, 1996



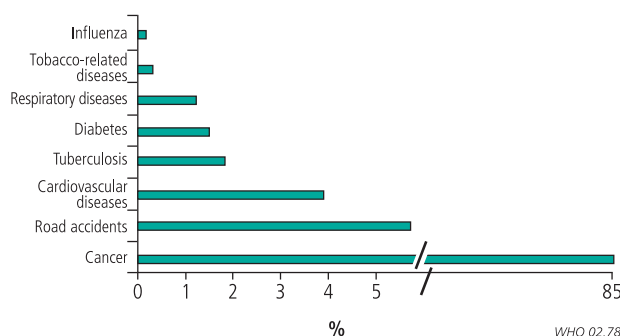
less than manual workers and service personnel. In most high-income countries there is a substantial difference in smoking prevalence between the different socioeconomic groups: people with lower socioeconomic and educational backgrounds smoke more than educated people of higher status (6, 15, 16). This is particularly true of men (6). The most recent research indicates that, in low-income and middle-income countries, men of low socioeconomic status smoke more than others (6). The numbers of attempts to quit smoking and the frequency of their success increase with age (17–19).

Tunisian research puts the average age at which the use of tobacco begins between 19 and 20 (9, 20). Elsewhere, people seem to begin experimenting with tobacco around the age of 14 (21). A more detailed analysis of our results shows differences in behaviour between the generations: the current generation of persons aged over 65 was significantly older than subsequent generations when they first tried tobacco, i.e. 24 as opposed to 18. Furthermore, the rate of tobacco use in individual women, measured in particular by the quantity of cigarettes smoked in a lifetime, was close to that of men, although they often began smoking at a later age.

There is also evidence of the enduring nature of certain forms of behaviour specific to Tunisian society, such as the use of water pipes (8, 9, 20) or traditional substances such as snuff. The use of the latter is confined largely to older people, particularly rural women (8).

With regard to attitudes and awareness, the present study confirms the findings of previous research in Tunisia (13, 22) and of observations made in Canada (23), France (24), and the United Kingdom (25). While a large majority of people interviewed in Tunisia (13, 22) acknowledged the damage done by smoking and made the link with cancer, particularly of the respiratory organs, the role of tobacco in the development of

Fig. 3. Diseases/hazards most feared by adults, Tunisia, 1996



other illnesses was apparently overlooked by a high proportion of interviewees. This is true, for instance, of the link between tobacco use and cardiovascular disease, recognized by only 41–63% of interviewees in Canada (23) and by 20.8% of those in France (24), and of the link between tobacco use and chronic pulmonary disease, recognized by only 41.1% of interviewees in Algeria (26).

There may be other explanations besides ignorance, related to people’s experience of illnesses and how they are represented in society (26). To most people, cancer means death and suffering; other illnesses may not come immediately to mind because, compared with cancer, they occupy a much lower place in the ranking of illnesses that concern people, being perceived as less serious and taking a long time to develop (26). Thus, as far as tobacco control is concerned, campaigns to educate and inform people, individually and collectively, would have an even greater impact if such gaps in awareness could be filled.

### Conclusion

Most tobacco users in Tunisia were men. The use of tobacco was more common in rural areas than in urban areas and among people of low socioeconomic status and low educational level than among those of high socioeconomic status and educational level. The age at which people began to smoke appeared to be falling. Among young people, the use of tobacco was confined almost exclusively to cigarette smoking. Older people often used snuff and were more successful than young people in their attempts to quit.

Awareness of the adverse effects of tobacco use was largely satisfactory, despite certain gaps that could possibly be explained by people’s experience of illnesses and the way they are represented in society.

Action should be taken to educate people about the use of tobacco, focusing not only on primary prevention, i.e. on discouraging young people from taking up the habit, but also on providing help and support for those who wish to quit smoking. Family doctors can play a pivotal role in this endeavour. ■

**Conflicts of interest:** none declared.



## Résumé

### Comportements et connaissances en matière de tabagisme en Tunisie

**Objectif** Evaluer les habitudes en matière de tabagisme dans la population adulte de Tunisie ainsi que les connaissances et attitudes du public vis-à-vis du tabac et de la lutte antitabac.

**Méthodes** Une étude transversale a été réalisée en 1996 sur un échantillon national représentatif de 5696 sujets âgés de 25 ans et plus. Les données ont été recueillies au moyen d'un questionnaire en langue arabe.

**Résultats** La consommation de tabac a été rapportée par 30,4 % des sujets enquêtés, dont 24,6 % étaient des fumeurs de cigarettes et 5,8 % des consommateurs exclusifs de tabac traditionnel (tabac à priser ou à chiquer et/ou narguilé). Le tabagisme concernait 55,6 % des hommes mais seulement 5,2 % des femmes. Chez les hommes, la proportion de sujets tabagiques diminuait avec l'âge, parallèlement à une augmentation des taux d'abandon. Chez les femmes, la proportion de fumeuses était maximale chez les 35-54 ans. En revanche, la proportion de consommateurs exclusifs de tabac traditionnel augmentait avec l'âge dans les deux sexes,

passant chez les hommes de 2,4 % des 25-34 ans à 20,4 % des plus de 55 ans, et chez les femmes de 0,1 % à 14,3 % pour ces mêmes tranches d'âge. Le tabagisme était plus répandu en milieu rural, chez les hommes ayant le plus faible niveau d'études et appartenant aux classes sociales défavorisées.

La quasi-totalité des sujets enquêtés (98,6 %) considérait le tabagisme comme une habitude nocive pour la santé. Plus de 90 % savaient que le tabac est incriminé dans l'apparition des maladies cardiaques. Les connaissances en matière de tabac comportaient toutefois des lacunes. La maladie la plus redoutée était le cancer (cité par 85 % des sujets enquêtés), alors que les accidents n'étaient mentionnés que par 5,6 % des enquêtés.

**Conclusion** En matière de lutte contre le tabac, des campagnes d'information et d'éducation, aussi bien à l'échelle individuelle que collective, doivent être menées en tenant compte des connaissances du public quant aux effets du tabac sur la santé.

## Resumen

### El consumo de tabaco en Túnez: comportamientos y conocimientos

**Objetivo** Evaluar el consumo de tabaco y el nivel de conocimientos y las actitudes respecto al tabaco y las medidas contra el mismo entre la población adulta de Túnez.

**Métodos** En 1996 se llevó a cabo un estudio transversal de una muestra nacional representativa de 5696 individuos de 25 años o más. Los datos se reunieron mediante un cuestionario redactado en árabe.

**Resultados** El 30,4% de los encuestados declaró que consumía tabaco: un 24,6% fumaba cigarrillos, y el 5,8% restante recurría a modalidades tradicionales de consumo de tabaco, por ejemplo rapé, tabaco mascado y/o narguile. Mientras que un 55,6% de los hombres consumían tabaco, sólo el 5,2% de las mujeres tenían ese hábito. Entre los hombres la proporción de consumidores de tabaco disminuía con la edad, a medida que aumentaba la tasa de abandono del hábito. Entre las mujeres el nivel de tabaquismo alcanzaba el máximo en el grupo de edad de 35 a 54 años. La proporción de hombres que consumía tabaco únicamente

mediante alguno de los métodos tradicionales aumentaba del 2,4% en el grupo de 25 a 34 años al 20,4% en el grupo de más de 55 años; los valores correspondientes para las mujeres eran del 0,1% y el 14,3%. El consumo de tabaco estaba más extendido en las zonas rurales que en las urbanas, y era relativamente elevado entre los hombres con bajo nivel de instrucción y de sectores económicamente desfavorecidos.

El 98,6% de los encuestados consideraban que el consumo de tabaco era nocivo para la salud. Más del 90% de los entrevistados sabían que el tabaco favorece la aparición de cardiopatías; sin embargo, esos conocimientos adolecían de algunas lagunas. El 85% de los encuestados expresaron su temor a desarrollar cáncer, mientras que sólo un 5,6% temía posibles accidentes.

**Conclusión** Las campañas informativas y educativas contra el tabaco deberían dirigirse a los individuos y comunidades teniendo en cuenta las lagunas observadas en el conocimiento de los efectos del tabaco sobre la salud.

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