Smoking in the Kingdom of Saudi Arabia: Findings from the Saudi Health Interview Survey

The Saudi Health Interview Survey (SHIS) is a large national survey aimed at assessing chronic diseases, health behaviors, and risk factors among adults aged 15 or older in the Kingdom of Saudi Arabia. The survey consists of a household roster, a questionnaire and physical measurements, and a lab-based biomedical examination. The questionnaire included several questions on tobacco use. The survey was developed in partnership between the Ministry of Health in Saudi Arabia and the Institute for Health Metrics and Evaluation of the University of Washington.

SHIS methodology

SHIS is a multi-stage nationally representative sample survey with probability of selection proportionate to the size of the population of adults 15 years or older. The survey was conducted in all Saudi regions, and data were collected between March and July 2013 from 10,827 participants. The sample was weighted to reflect the Saudi population aged 15 and older based on probability of selection and post-stratification.

The smoking section covered questions on ever- and current-smoking status, type and frequency of tobacco products consumed, consumption of smokeless tobacco products, age of smoking initiation, secondhand smoke exposure; and attempts and health care advice to quit smoking.

Findings

Our findings are representative of the Saudi population aged 15 years and older.

Overall, 12.1% of Saudis reported that they currently smoke tobacco. This prevalence was 23.7% among males and 1.5% among females. The prevalence of tobacco smoking varied by age; among those aged 65 and older, the prevalence of tobacco smoking was the lowest: 6.5% (9.7% among males and 1.8% among females). Saudis aged 55 to 64 years had the highest prevalence of current smoking (15.6%) with 24.7% among males and 4.2% among females.

Daily tobacco smoking is 11.4% – 21.5% among males and 1.1% among females.

11.4% (21.5% among males and 1.1% among females) of smokers consume cigarettes daily with an average of 15.0 cigarettes per day. 11.2% of Saudis consume shisha daily (20.9% for males and 1.4% for females).

0.3% of Saudis consumed smokeless tobacco products daily (0.5% among males and 0.2% among females).

On average, Saudis start smoking at age 18.7 (males at 19.0 and females at 21.6).

Overall, 29.7% started smoking before the age of 15, and 60.9% started smoking before the age of 18.

17.2% of Saudis are exposed to secondhand smoke at home, with an average of 5.1 days of exposure per week. This secondhand exposure is 20.9%, with an average of 4.8 days of exposure per week, for males, and 13.1%, with an average of 5.5 days of exposure per week, for females.

14.8% of Saudis are exposed to secondhand smoke at work, with an average of 2.2 days of exposure per week. This secondhand exposure at work affects 24.9% of males, with an average of 4.3 days of exposure per week, and 2.6% of females, with an average of 1.4 days of exposure per week.

Among smokers, 49.1% attempted to quit smoking within the last 12 months (50.1% for males and 34.1% for females).

53.9% of smokers (54.5% for males and 45.2% for females) reported being advised by their doctor or a health care professional to quit smoking during any visit within the last 12 months.

Table 1: Current tobacco use among Saudis

	Overall % (SE)	Men % (SE)	Women % (SE)
Current tobacco smokers	12.2 (0.4)	23.7 (0.8)	1.5 (0.2)
Daily tobacco smokers	11.4 (0.4)	21.5 (0.8)	1.1 (0.2)
Current daily cigarette smokers	11.4 (0.4)	21.5 (0.8)	1.1 (0.2)
Current daily shisha smokers	11.2 (0.4)	20.9 (0.8)	1.4 (0.2)
Former tobacco smokers	3.8 (0.2)	6.8 (0.4)	0.6 (0.2)
Current smokeless tobacco smokers	0.4 (0.1)	0.6 (0.1)	0.2 (0.1)
Current daily smokeless tobacco smokers	0.3 (0.1)	0.5 (0.1)	0.2 (0.1)
Current tobacco users	12.5 (0.4)	22.9 (0.8)	1.7 (0.2)
Smoked 16 or more cigarettes per day	42.3 (2.0)	44.0 (2.0)	9.4 (3.5)
Average number of cigarettes smoked per day	15.0 (0.9)	15.6 (0.9)	3.7 (1.1)
Started smoking before age 15	29.7 (2.8)	30.5 (3.0)	22.0 (9.0)
Started smoking before age 18	60.9 (2.2)	62.5 (2.3)	38.7 (8.5)
Average age of smoking initiation	18.7 (0.2)	19.0 (0.2)	21.6 (1.0)

Note: values presented are in percent, except for average number of cigarettes smoked and age at smoking initiation; SE = standard error.

Table 2: Exposure to secondhand smoke

	Overall % (SE)	Men % (SE)	Women % (SE)
Exposed to secondhand smoke at home	17.2 (0.6)	20.9 (0.9)	13.1 (0.7)
Average number of days exposed to secondhand smoke at home	5.1 (0.1)	4.8 (0.1)	5.5 (0.1)
Exposed to secondhand smoke at work	14.8 (0.6)	24.9 (1.0)	3.9 (0.4)
Average number of days exposed to secondhand smoke at work	2.2 (0.1)	2.6 (0.1)	1.4 (0.2)

Note: values presented are in percent, except for average number of days exposed to second hand smoke; SE = standard error.

Table 3: Smoking by age group and sex

Age	Overall % (SE)	Men % (SE)	Women % (SE)
15 - 24	8.6 (0.8)	16.1 (1.4)	0.8 (0.3)
25 - 34	16.2(1.0)	30.5(1.7)	1.2(0.3)
35 - 44	14.6 (0.9)	30.6(1.8)	1.3(0.3)
45 - 54	14.4(1.2)	26.5(2.1)	2.9(0.7)
55 - 64	15.6(1.8)	24.7(2.9)	4.2(1.8)
65+	6.5(1.3)	9.7(2.0)	1.8(0.8)
	12.2(0.4)	22.7(0.8)	1.5(0.2)

Note: values presented are in percent; SE = standard error.

Table 4: Smokers attempting to quit or have been advised to quit smoking by a health care professional, by sex

	Overall (%)	Men (%)	Women (%)
Current smokers who attempted to quit smoking within the last 12 months	49.1 (1.9)	50.1 (2.0)	34.1 (7.1)
Current smokers who have been advised to quit smoking by a doctor or a health care professional within the last 12 months	53.9 (2.0)	54.5 (2.0)	45.2 (7.4)

Note: values presented are in percent; SE = standard error.

The MOH conducted a large national survey in 2005 that included questions on tobacco. In that survey, the prevalence of smoking was 12.2% (23.6% for men and 1.5% for females) among those aged 25-64. When we restricted our analyses to the same age groups, the prevalence form SHIS in 2013 was 15.3% (28.9% for males and 2.0% for females). This increase in smoking among males is alarming and of great concern to the MOH.