

National Adult Tobacco Survey (GATS-Global Adult Tobacco Survey), Senegal 2015

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Abstract

Introduction: The Global Adult Tobacco Survey (GATS) is a global standard for the systematic monitoring of (smoking and smokeless) tobacco use among adults and for the monitoring of key tobacco control indicators. Senegal carried out a national survey on adult smoking for the first time in 2015.

Objective: GATS enhances the capacity of countries to design, implement and evaluate tobacco control programs. It also supports countries to fulfill their obligations under the WHO Framework Convention on Tobacco Control (FCTC).

Methodology: GATS is a nationally representative survey, which uses a standardized and consistent protocol. It collects information on respondents' history, smoking and smokeless tobacco use, smoking cessation, passive smoking, economic context, media, and knowledge, perceptions and attitudes on tobacco use. In Senegal, GATS was conducted in 2015 as a household survey of persons aged 15 years and over by the Agence Nationale de la Statistique et de la Démographie (ANSD), under the coordination of the Ministry of Health and Social Action. A stratified multistage cluster sample model was used to produce representative data at the national level. A total of 4514 households were successfully interviewed and an individual aged 15 years and over was randomly selected from each selected household to take the survey. Survey data was collected through the use of a handheld device called Personal Digital Assistance (PDA).

Results

Individual coverage rate: Of the 4,514 households selected for the survey, 4,416 (97.8%) were successfully surveyed and 4,347 (98.4%) eligible people were selected to complete the interview.

Tobacco consumption: Half a million Senegalese adults currently use tobacco products with 11.0% men and 1.2% women. Smoking tobacco is the main form of tobacco use. There was no significant difference in tobacco use between urban (5.8%) and rural (5.0%) areas.

Weaning: 8 out of 10 current smokers have considered smoking cessation or thought about stopping smoking. The percentage of these people is higher in rural area (66.2%). Tobacco expenses: The monthly cost of cigarettes per smoker is 6,716 to 10,000 FCA.

Passive smoking: Half a million (30.4%) of workers were exposed to passive smoking at their workplace and 1.642 million (21.6%) at home.

Knowledge, attitudes and perceptions: 94% of the adults believe that smoking can cause disease.

Media: 4 out of 10 adults saw tobacco advertising in the media.

Conclusion: Smoking is a public health issue in Senegal; the analysis of the results of this national survey will help the implementation of the anti-smoking law adopted recently in Senegal.

Keywords: National Survey; Smoking; Prevalence; Senegal

Introduction

Senegal carried out a national survey on adult smoking for the first time, in 2015 [1]. This initiative is part of the Global Adult Tobacco Survey (GATS), which is a global standard for the systematic monitoring of tobacco use (smoking and smokeless) by

adults and key indicators of tobacco control [2]. Indeed, there are no national studies on smoking prevalence among adults in Senegal. This justifies and makes relevant the GATS survey [3]. However, the Global Youth Tobacco Survey (GYTS), which target young people aged 13 to 15 who attend school, has been conducted in Senegal in 2002, 2007 and 2013 [4]. Data from GATS will complement GYTS data. The results of the GATS will improve Senegal's capacity to design, implement and evaluate tobacco control programs. It will also support Senegal in fulfilling its obligations under the WHO Framework Convention on Tobacco Control (FCTC). The objective of this article is to present smoking prevalence among adults and the socio-demographic characteristics of smokers based on the results of Senegal's GATS 2015.

Methods

In Senegal, GATS was conducted in 2015, as a national household survey of persons aged 15 years and older by the National Agency for Statistics and Demography (NASD), under the coordination of the Ministry of Health and Social Action.

Study Population

The study population comprised all men and women not living in a specialized institution, aged 15 or more and who considered Senegal as their place of residence. All the people in the study population are sampled based on the ordinary household where they live. Institutionalized populations in places such as "daaras" (Islamic schools), prisons, military bases, boarding, hotels, etc are excluded from the sample of households. In addition, individuals aged 15 years or older, who are explicitly excluded from the survey, are those who at the time of the survey were:

- Non-Senegalese citizens who are visiting the country for a few weeks (e.g., tourists, people in the country to see friends/relatives, etc.);
- Citizens in the military who indicate that their usual place of residence is a military base;
- Citizens who live in specialized institutions, including people residing in hospitals, prisons, retirement homes, and other similar institutions.

Study Sample

The sample GATS Senegal is a random sample, stratified and drawn at 3 levels. The primary survey unit for the survey is the Census District (DR) as defined in the Fourth General Census of Population and Housing, Agriculture and Livestock (RGPHAE) 2013. That is the smallest geographical unit created for field operations needs and contains on average 100 households. A total of 244 DRs were selected, of which 122 were from urban areas or 122 from rural areas. With regard to households, 4,514 were selected, including 2,318 in urban areas and 2,196 in rural areas.

Data Collection

Survey data was collected through the use of a handheld device called Personal Digital Assistance (PDA). Two questionnaires were used during the survey: the household questionnaire and the individual questionnaire for adults aged 15 years or older. The content of these questionnaires is based on the standardized questionnaires to which optional questions developed for GATS were added. These questionnaires have been adapted and modified to ensure the relevance of the questions and their applicability to the situation in Senegal. The household questionnaire allowed the random selection of an individual to take the survey out of a list of all eligible residents in the household. This questionnaire includes sections for recording information on: demographic characteristics, smoking tobacco, water pipe (shisha/hookah), Electronic cigarettes, smokeless tobacco, smoking cessation, passive smoking, economic factors-manufactured cigarettes, the media, Knowledge, Attitudes and Perceptions about tobacco products. A balanced allocation of the workload assigned to each team was carried out to cover the sampled 244 DRs throughout the national territory. The data collection took place between February 25 and March 23, 2015 with 11 teams each consisting of a supervisor, four investigators and a driver.

Data Analysis Strategies

At the end of the data collection, all data aggregated by the supervisors were combined in a single file in sdf format. Subsequently, the file obtained was transformed into an analysis file in SPSS format using the Aggregate module of the General Survey System. The method of analyzing complex survey data was used to obtain population estimates and the 95% confidence intervals. Sampling weights were developed for each respondent following standard procedures established in the GATS sampling and weighting manuals. This study will focus on results on tobacco use as well as on aspects of tobacco control (passive smoking and the media).

Results

Coverage of the Sample

Table 1 shows that of the 4,514 households selected for the survey, 4,416 (97.8%) were successfully surveyed and 4,347 (98.4%)

eligible people were selected to complete the interview. The overall response rate is 97% (Table 1). This rate is higher in rural areas than urban (98.1% versus 96%). The household response rate is 98.5% and varies by area, 99.3% in rural areas compared to 97.8% in urban areas. The individual response rate is 98.5% with almost equal proportions between rural (98.8%) and urban (98.2%) areas.

	Residence				Total	
	Urban		Rural			
	Number	Percentage	Number	Percentage	Number	Percentage
Selected households						
Survey completed (HC)	2,242	96.7	2,174	99.0	4,416	97.8
Completed – but no eligible individual (HCNE)	0	0.0	1	0.0	1	0.0
Incomplete survey (HINC)	2	0.1	0	0.0	2	0.0
No response at the selected house (HNS)	2	0.1	0	0.0	2	0.0
No individual at the house (HNH)	25	1.1	9	0.4	34	0.8
Refusal (HR)	16	0.7	4	0.2	20	0.4
Vacant house (HUO)	19	0.8	4	0.2	23	0.5
Address is not a house (MAIN)	6	0.3	1	0.0	7	0.2
Other ¹ (HO)	6	0.3	3	0.1	9	0.2
Total number of household selected	2,318	100	2,196	100	4,514	100
Household response rate (HRR) (%)²	97.8%		99.3%		98.5%	
Person selected						
Survey completed (PC)	2,200	98.1	2,147	98.8	4,347	98.4
Incomplete (PINC)	4	0.2	6	0.3	10	0.2
Non-eligible (PNE)	2	0.1	1	0.0	3	0.1
Absent (PNH)	24	1.1	10	0.5	34	0.8
Refusal (PR)	5	0.2	0	0.0	5	0.1
Inability (PI)	5	0.2	9	0.4	14	0.3
Other ¹ (PO)	2	0.1	1	0.0	3	0.1
Total persons sampled	2,242	100	2,174	100	4,416	100
Persons response rate (PRR) (%)³	98.2%		98.8%		98.5%	
Total response rate (RRT) (%)⁴	96.0%		98.1%		97.0%	

¹ « Other » comprises any result not included in the list.

²Households response rate (FCR) is calculated as follow:

$$\frac{HC}{HC + HINC + HNS + HNH + HR + HO} * 100$$

³Persons response rate (PRR) is calculated as follow:

$$\frac{PC}{PC + PINC + PNH + PR + PI + PO} * 100$$

⁴ Total response rate (RRT) is calculated as follow: $(HRR \times PRR)/100$

Table 1: Number/percentage of households and respondents, and response rates by residence (unweighted)-GATS Senegal, 2015

Characteristics of the Participants

The unweighted sample (complete responses) comprises 4,347 individuals aged 15 and over. Of these people, 1,963 were men and 2,384 were women. The GATS 2015 survey estimates the Senegalese population of persons aged 15 years and over to 7,827,007. Of this population, 3.8 million are women and 4.03 million are men, respectively 48.5% and 51.5%. The unweighted sample in rural areas is slightly larger than in urban areas. The majority of the adults sample is in the 25-44 age group (41.6%) and the 15-24 age group (33.9%). People aged 65 and over account for only 6.1%. This structure follows that of the population census. For all eligible respondents aged 15 years and over, data on the highest level of education attained were collected. In this report, the level of education was grouped into five different categories: no formal education, elementary education, average education, secondary education and baccalaureate and more. Overall, it appears that a large proportion of the population aged 15 and over, more than one in two adults, has no formal education (54.6%), one in five (20.1%) has elementary education. Adults aged 15 and over who have reached the final year of secondary education at least, represent only 5.4%.

Demographic Characteristics	Weighted		Non-weighted number for adults
	Percentage (IC 95 % ¹)	Number of adults (in thousands)	
Global	100	7,827	4,347
<i>Sex</i>			
Male	48.5 (46.7, 50.4)	3 798.5	1 963
Female	51.5 (49.6, 53.3)	4 028.5	2 384
<i>Age (years)</i>			
15-24	33.9 (32.0, 35.8)	2 651.5	1 189
25-44	41.6 (39.7, 43.5)	3 252.7	1 944
45-64	18.5 (17.2, 19.8)	1 448.1	939
65 and more	6.1 (5.2, 7.0)	474.7	275
<i>Residence</i>			
Urban	49.9 (48.6, 51.2)	3 909.4	2 200
Rural	50.1 (48.8, 51.4)	3 917.6	2 147
<i>Education level²</i>			
No formal education	54.6 (52.0, 57.2)	4 269.2	2 479
Elementary school	20.1 (18.6, 21.8)	1 574.4	839
Middle school	12.1 (10.8, 13.6)	947.1	464
High school	7.8 (6.7, 8.9)	606.5	304
Baccalaureate and other	5.4 (4.4, 6.6)	418.7	254

Note: The following observations are missing: [7] for education

¹95% Confidence Interval (IC)

²Elementary education includes «HAS NOT FINISHED ELEMENTARY EDUCATION» and «HAS FINISHED ELEMENTARY EDUCATION»; Average education includes «HAS NOT FINISHED HIS ENSEIGNEMENT MOYEN EDUCATION» and «HAS FINISHED HIS ENSEIGNEMENT MOYEN EDUCATION», secondary education includes «HAS NOT FINISHED HIS SECONDARY EDUCATION» and «HAS FINISHED HIS SECONDARY EDUCATION» and baccalaureate includes «BACCALAUREATE AND MORE», «UNIVERSITY FIRST CYCLE DIPLOMA» et «UNIVERSITY SECOND AND THIRD CYCLE DIPLOMA».

Table 2: Distribution of adults aged over 15 years by selected demographic characteristics - GATS Senegal, 2015

Prevalence of Tobacco Use

In Senegal, half a million (6%) of adults currently use tobacco products. Of these tobacco users, 88.8% use smoking tobacco only, 9.6% use smokeless tobacco only, and 1.6% use both smoking and smokeless tobacco. Males account for 11% of tobacco users, with a majority (96.8%) using smoking tobacco. On the contrary, 71% of women who use tobacco (1.2% of women use tobacco) use smokeless tobacco only. In addition, 10.8% of women who use tobacco use both smoking and smokeless tobacco, compared to only 0.6% of men (Table 3).

The proportion of tobacco users is lower (2.8%) among younger people (15-24 years) than in older age groups; It is 7% among the 25-44 years old and 9.2% among the 45-64 years old people. All tobacco users aged 15 to 24 use smoking tobacco, as well as, the vast majority of adults aged 25 to 44 (94.8%) and 45 to 64 (85.4%). The proportion of current tobacco users is the same in rural areas (5.9%) as in urban areas (6.1%). The difference lies in the type of tobacco products used. Indeed, among smokeless tobacco users, 17.6% are from rural areas compared to 1.5% from urban areas. The proportion of tobacco users is 5.9% among adults with no formal education; 8% of the users have completed primary level education, 4.9% have completed average education, 2.9% have completed secondary school and 6.5% have baccalaureate and higher. Among adult tobacco users, the majority use tobacco regardless of their education level; 81.7% of the smokers are adults without any formal education and 95% are adults at the primary education level.

Prevalence of Current Smokers by Smoking Tobacco Products

Overall, the prevalence of smoking tobacco use among adults is 5.4%. Males outnumber women (10.7% vs. 0.4%) among current tobacco smokers (Table 4). The prevalence is 4.0% for the use of manufactured cigarettes, 1.4% for rolled cigarettes and 0.8% for other types of smoking tobacco products. Tobacco use is more common among people aged 45-64 (8%) and

those aged 25-44 (6.7%) than among younger people aged 15-24 years (2.8%). This trend is maintained when rolled cigarettes are considered but not the use of manufactured cigarettes. The proportion of young people aged 15 to 24 is the same as that of adults aged 45 to 64 years who smoke manufactured cigarettes. The use of manufactured cigarette decreases at the age of 65 going from 4.4% among those aged 45-64 to 0.8% for older people aged 65 and more. The prevalence of smoking tobacco use is the same in rural areas (5%) as in urban areas (5.8%), regardless of the type of smoking tobacco products considered. In terms of educational attainment, in general there is no significant difference in the prevalence of smoking tobacco products use among adults at different levels. However, prevalence of use of manufactured cigarettes is higher among adults at the primary education level (5.9%) than for those without any formal education (3.1%).

Demographic Characteristics	Current tobacco users ¹	Type of tobacco products currently used			Total
		Smoking tobacco only	Smokeless tobacco only	Smoking and smokeless tobacco	
		Percentage (IC 95%)			
Overall	6.0 (5.1, 7.0)	88.8 (82.9, 92.8)	9.6 (5.8, 15.5)	1.6 (0.7, 3.9)	100
Sex					
Male	11.0 (9.4, 12.9)	96.8 (93.9, 98.4)	2.6 (1.2, 5.5)	0.6 (0.1, 2.3)	100
Female	1.2 (0.7, 2.0)	18.1 (6.9, 39.7)	71.0 (48.7, 86.4)	10.8 (3.2, 30.9)	100
Age (years)					
15-24	2.8 (1.8, 4.3)	100.0	0.0	0.0	100
25-44	7.0 (5.8, 8.5)	94.8 (86.3, 98.2)	4.5 (1.4, 13.5)	0.7 (0.1, 4.8)	100
45-64	9.2 (7.0, 11.9)	85.4 (74.5, 92.1)	12.3 (6.2, 22.9)	2.3 (0.7, 7.8)	100
65+	6.4 (3.8, 10.6)	*	*	*	100
Residence					
Urban	5.9 (4.7, 7.3)	98.5 (92.8, 99.7)	1.5 (0.3, 7.2)	0.0	100
Rural	6.1 (4.8, 7.6)	79.2 (68.9, 86.7)	17.6 (10.4, 28.2)	3.2 (1.3, 7.7)	100
Education level					
No formal education	5.9 (4.8, 7.2)	81.7 (72.6, 88.3)	15.9 (9.7, 25.2)	2.4 (0.9, 6.4)	100
Elementary school	8.0 (6.0, 10.5)	95.0 (80.1, 98.9)	3.7 (0.5, 22.0)	1.3 (0.2, 8.3)	100
Middle school	4.9 (3.1, 7.5)	*		*	100
High school	2.9 (1.5, 5.3)	*		*	100
Baccalaureate and more	6.5 (3.7, 11.0)	*		*	100

¹Includes daily and occasional users (using less than one per day) of smoking and smokeless tobacco.

*Indicate removal of estimates based on unweighted numbers below 25.

Table 3: Distribution in percentage of current tobacco users aged 15 years and over, by type of tobacco consumed and selected demographic characteristics- GATS Senegal, 2015

Age of initiation of Daily Smoking Tobacco Use

Among adults aged 20-34 who had ever smoked daily, 28.4% started smoking daily at the age of 20 or older, 22.8% at the age of 17-19, 23.7% at the age of 15-16, and 25.1% before the age of 15. Thus, about 71.6% of smokers start smoking before the age of 20 years. Entry into daily tobacco smoking is more prevalent in rural than urban areas. Among adults aged 20-34 who had ever smoked daily in rural areas, 36.7% began smoking every day at the age of 15 compared to 15.9% in urban areas. However, this difference is not statistically significant.

Prevalence of Passive Smoking in Indoor Workplaces

Overall, 30.4% of workers are exposed to second-hand smoke in indoor workplaces. This figure is reduced to 28.9% among non-smokers. Exposure to second-hand smoke in workplaces varies according to demographic characteristics of the workers. More male workers are exposed to second-hand smoke than female workers, both in the general population and among non-smokers. Exposure to second-hand smoke in workplaces increases with age (Example). The prevalence is 32.4% for adults living in urban areas and 25.2% for those in rural areas. Depending on the educational attainment, primary education level adults have the highest proportion of exposure to second-hand smoke in workplaces in the general population (31.4%), whereas among non-smokers, those with no formal education (30%) are the more concerned. The lowest proportion was observed among average education level adults in the general population (27.8%) and among non-smokers (27.3%).

Demographic characteristics	All smoking tobacco products	Any cigarettes ¹	Type of cigarettes		Other tobacco products
			Manufactured	Rolled cigarettes	Smoking tobacco ²
<i>Percentage (IC 95%)</i>					
Overall	5.4 (4.6, 6.3)	4.9 (4.1, 5.8)	4,0 (3.2, 4.8)	1.4 (1.0, 1.8)	0.8 (0.5, 1.1)
Sex					
Male	10.7 (9.1, 12.5)	9.7 (8.2, 11.5)	8,0 (6.5, 9.7)	2.6 (2.0, 3.5)	1.5 (1.0, 2.2)
Female	0.4 (0.2, 0.8)	0.3 (0.1, 0.7)	0,2 (0.1, 0.5)	0.2 (0.1, 0.6)	0.1 (0.0, 0.4)
Age (years)					
15-24	2.8 (1.8, 4.3)	2.6 (1.7, 4.2)	2,5 (1.6, 4.1)	0.3 (0.1, 0.9)	0.3 (0.1, 1.0)
25-44	6.7 (5.5, 8.1)	6.4 (5.3, 7.8)	5,4 (4.3, 6.7)	1.6 (1.0, 2.4)	0.5 (0.2, 0.9)
45-64	8.0 (6.1, 10.5)	6.5 (4.8, 8.8)	4,4 (3.2, 6.2)	3.1 (2.0, 4.7)	2.1 (1.2, 3.6)
65+	2.6 (1.1, 6.2)	1.5 (0.5, 4.0)	0,8 (0.2, 2.8)	0.7 (0.2, 3.1)	1.2 (0.4, 3.5)
Residence					
Urban	5.8 (4.6, 7.2)	5.5 (4.4, 6.9)	4,8 (3.8, 6.1)	1.1 (0.7, 1.8)	0.4 (0.2, 0.8)
Rural	5.0 (3.9, 6.3)	4.2 (3.2, 5.5)	3,1 (2.2, 4.4)	1.6 (1.1, 2.3)	1.1 (0.7, 1.7)
Education level					
No formal education	4,9 (3.9, 6.1)	4,1 (3.2, 5.2)	3,1 (2.4, 4.2)	1,4 (0.9, 2.0)	1,0 (0.7, 1.5)
Elementary school	7,7 (5.8, 10.1)	7,4 (5.6, 9.9)	5,9 (4.2, 8.3)	2,2 (1.3, 3.6)	0,7 (0.3, 1.8)
Middle school	4,8 (3.1, 7.5)	4,8 (3.1, 7.5)	4,3 (2.7, 6.9)	1,1 (0.5, 2.8)	0,3 (0.0, 1.3)
High school	2,9 (1.5, 5.3)	2,4 (1.3, 4.5)	2,4 (1.2, 4.5)	0,4 (0.1, 1.9)	0,5 (0.1, 3.2)
Baccalaureate and more	6,5 (3.7, 11.0)	6,5 (3.7, 11.0)	6,5 (3.7, 11.0)	0,2 (0.0, 0.8)	0,0

Note: Current smoking tobacco users include daily and occasional users (less than one per day).

¹Include manufactured and hand rolled cigarettes.

²Include pipes cigars and all other smoking tobacco products.

Table 4: Percentage of adults aged 15 years and over who are current smokers of various smoking tobacco products, by sex and selected demographic characteristics-GATS Senegal, 2015

Demographic characteristics	Age of initiation of daily use of smoking tobacco (in years) ¹						Total
	<15	15-16	17-19	20+			
<i>Percentage (IC 95%)</i>							
Overall	25.1 (16.1, 36.9)	23.7 (15.6, 34.3)	22.8 (14.4, 34.1)	28.4 (19.9, 38.9)			100
Sex							
Male	25.3 (16.1, 37.4)	22.6 (14.4, 33.7)	23.7 (14.7, 35.8)	28.4 (19.5, 39.4)			100
Female	*	*	*	*			100
Residence							
Urban	15.9 (7.4, 30.6)	24.8 (13.9, 40.2)	26.7 (15.7, 41.6)	32.7 (20.6, 47.6)			100
Rural	36.7 (21.4, 55.2)	22.3 (12.0, 37.6)	17.9 (7.3, 37.7)	23.1 (13.2, 37.3)			100

¹Among the respondents aged 25-34 of adults who have ever smoked daily (current and former daily smokers).

*Indicate the removal of estimates based on unweighted numbers below 25.

Table 5: Percentage distribution of adults aged 20-34 who have ever smoked daily by age of initiation of daily smoking tobacco use, sex and place of residence-GATS Senegal, 2015

Demographic characteristics	Adults exposed to tobacco smoke in the workplace ¹				
	Overall		Non-smokers		
	Percentage (IC à 95 %)	Number in thousands	Percentage (IC à 95 %)	Number in thousands	
Overall	30.4 (26.5, 34.6)	463.0	28.9	(25.0, 33.1)	405.9
Sex					
Male	33.0 (28.4, 37.9)	338.4	31.0	(26.3, 36.0)	281.3
Female	25.1 (19.4, 31.7)	124.6	25.1	(19.4, 31.7)	124.6
Age (years)					
15-24	28.3 (21.4, 36.2)	126.4	28.3	(21.3, 36.5)	124.1
25-44	31.1 (26.0, 36.7)	243.0	28.6	(23.6, 34.3)	202.0
45-64	31.9 (24.1, 40.8)	87.8	30.6	(22.6, 39.9)	74.3
65 +	*	*	*		*
Residence					
Urban	32.4 (27.8, 37.4)	355.8	31.5	(26.9, 36.6)	318.6
Rural	25.2 (18.7, 33.0)	107.2	22.1	(15.8, 30.1)	87.3
Education level²					
No formal education	31.0 (25.0, 37.7)	163.0	30.0	(24.0, 36.7)	148.0
Elementary school	31.4 (24.5, 39.2)	137.3	29.4	(22.3, 37.6)	113.8
Middle school	27.8 (19.9, 37.5)	73.3	27.4	(19.2, 37.5)	66.0
High school	29.0 (18.7, 42.1)	35.4	27.3	(17.0, 40.8)	32.6
Baccalaureate and more	31.0 (22.0, 41.7)	54.0	27.9	(19.3, 38.6)	45.5

¹Within the last 30 days. Among respondents who work outside the home, usually indoors, or indoors and outdoors.

*Indicate suppression of estimates based on unweighted numbers below 25.

Table 6: Percentage and number of adults over 15 years of age who work in confined environments and are exposed to tobacco smoke at work, by smoking status and selected demographic characteristics - GATS Senegal, 2015

Exposure to Second-hand Smoke in Indoor Public Places

In the overall adult population aged 15 and older, 7.8% of are exposed to second-hand smoke in public transport; 5.6% in schools; 4.7% in government buildings; 3.0% in health care facilities and restaurants; 1.8% in universities and 1.7% in bars, and nightclubs.

Adults Aged 15 and over who have Noticed Anti-cigarette Information in the Last 30 Days on Various Media Support

As shown in Table 8, about five in ten adults (46.6%) have noticed anti-cigarette information from any media (radio, television, poster, etc.) in the past 30 days. Of these, the majority noted anti-cigarette information on television or radio (41.6%), followed by billboards (7.6%), elsewhere (6.2%) and in newspapers or magazines (5.2%). There is no substantial difference in the percentage of adults who noticed anti-cigarette information in the general population (46.6%) and among non-smokers (46.3%), but a slight difference is noted among current smokers (51.7%), all media support combined (Table 8).

Advertising, promotion, and sponsorship

Overall, almost three in ten current smokers (29.6%) have noticed cigarette advertising over the past 30 days. Current smokers in urban areas (41.9%) were more likely to notice cigarette marketing than rural smokers (15.2%). The proportion of current smokers who have noticed cigarette marketing differs with the age group: 30.5% among people aged 25 or older compared to 25.5% among those aged 15-24. Smokers were more likely to notice cigarette advertising in stores (16.3%), followed by posters (8.0%), billboards (7.1%), radio (5.0%), public transport, and stations (3.3%). The percentage of smokers who noticed sports sponsorship is 2%. The type of promotional activities most frequently noticed by smokers is distribution of free cigarettes samples (9.0%). Other notable promotional activities include clothes or other items bearing the name or logo of cigarette brands (7.4%), gifts/discounts on other products (6.8%) and discounts on prices (4.3%).

Demographic characteristics	Adults exposed to tobacco smoke 1 in...						
	Government buildings	Health care facilities	Restaurants	Bars, Night-clubs	Public transportation	Universities	Schools and other institutions
<i>Percentage (95% CI)</i>							
Overall	4.7 (3.9, 5.5)	3.0 (2.4, 3.7)	3.0 (2.4, 3.9)	1.7 (1.2, 2.4)	7.8 (6.9, 8.9)	1.8 (1.3, 2.5)	5.6 (4.7, 6.6)
Sex	<i>Sex</i>						
Male	6.5 (5.3, 7.9)	2.9 (2.1, 4.0)	4.1 (3.1, 5.4)	2.8 (1.9, 4.0)	10.1 (8.6, 12.0)	2.5 (1.8, 3.5)	6.8 (5.4, 8.5)
Female	3.0 (2.2, 4.0)	3.0 (2.3, 4.0)	2.0 (1.4, 2.8)	0.7 (0.4, 1.2)	5.7 (4.7, 6.8)	1.2 (0.8, 1.8)	4.4 (3.5, 5.6)
<i>Age (years)</i>							
15-24	4.1 (3.0, 5.6)	2.0 (1.3, 3.2)	2.0 (1.3, 3.0)	2.3 (1.4, 3.7)	8.4 (6.7, 10.5)	2.4 (1.5, 3.8)	11.0 (8.8, 13.5)
25-44	4.5 (3.5, 5.8)	3.4 (2.5, 4.7)	4.0 (2.9, 5.4)	1.9 (1.3, 2.9)	7.6 (6.3, 9.1)	2.2 (1.5, 3.2)	3.4 (2.4, 4.8)
45-64	7.0 (5.3, 9.2)	3.7 (2.4, 5.7)	3.6 (2.4, 5.4)	0.7 (0.3, 1.7)	8.7 (6.8, 11.1)	0.5 (0.2, 1.2)	2.1 (1.3, 3.4)
65+	1.9 (0.6, 5.8)	3.1 (1.5, 6.5)	1.0 (0.3, 3.2)	0.0	3.6 (1.8, 7.0)	0.0	0.8 (0.2, 4.1)
<i>Residence</i>							
Urban	7.5 (6.2, 9.1)	4.5 (3.5, 5.7)	5.0 (3.8, 6.5)	2.5 (1.8, 3.5)	11.0 (9.4, 12.9)	3.6 (2.6, 4.8)	8.5 (7.1, 10.3)
Rural	1.8 (1.3, 2.6)	1.5 (1.0, 2.3)	1.1 (0.7, 1.8)	1.0 (0.4, 2.2)	4.7 (3.7, 5.9)	0.1 (0.0, 0.2)	2.6 (1.7, 3.9)
<i>Education level</i>							
No formal education	2.3 (1.6, 3.2)	2.0 (1.3, 2.9)	1.2 (0.8, 1.8)	0.4 (0.2, 0.8)	5.3 (4.4, 6.5)	0.0 (0.0, 0.2)	0.9 (0.5, 1.5)
Elementary school	5.1 (3.6, 7.2)	3.8 (2.5, 5.8)	3.5 (2.2, 5.6)	1.8 (1.0, 3.2)	10.4 (8.1, 13.2)	0.2 (0.1, 0.6)	2.9 (1.8, 4.5)
Middle school	6.4 (4.3, 9.3)	3.2 (1.8, 5.5)	3.9 (2.4, 6.2)	3.3 (1.8, 5.8)	11.1 (8.2, 14.9)	1.1 (0.3, 4.4)	14.6 (10.7, 19.6)
High school	10.0 (6.5, 15.1)	4.0 (2.1, 7.6)	5.0 (3.0, 8.1)	5.3 (2.8, 10.0)	9.4 (6.1, 14.1)	2.2 (1.0, 5.1)	24.9 (19.8, 30.9)
Baccalaureate and more	16.0 (11.6, 21.7)	8.3 (4.7, 14.1)	15.5 (9.8, 23.7)	6.1 (3.5, 10.6)	14.4 (10.1, 20.3)	27.4 (21.3, 34.5)	15.4 (10.5, 21.8)
Non-smokers	4.6 (3.8, 5.4)	2.9 (2.3, 3.7)	2.9 (2.2, 3.7)	1.4 (1.0, 2.1)	7.8 (6.8, 9.0)	1.8 (1.3, 2.5)	5.7 (4.8, 6.8)
<i>Sex</i>							
Male	6.4 (5.2, 7.9)	2.8 (2.0, 4.0)	3.9 (2.9, 5.3)	2.3 (1.5, 3.6)	10.3 (8.7, 12.3)	2.6 (1.8, 3.7)	7.2 (5.7, 9.1)
Female	3.0 (2.2, 4.0)	3.0 (2.3, 4.0)	2.0 (1.4, 2.8)	0.7 (0.4, 1.2)	5.7 (4.7, 6.8)	1.2 (0.8, 1.8)	4.4 (3.5, 5.6)
<i>Age (years)</i>							
15-24	4.0 (2.9, 5.5)	2.0 (1.3, 3.2)	2.0 (1.3, 3.1)	2.1 (1.2, 3.5)	8.4 (6.6, 10.5)	2.4 (1.5, 3.7)	11.3 (9.1, 13.9)
25-44	4.4 (3.3, 5.8)	3.3 (2.4, 4.7)	3.7 (2.6, 5.2)	1.4 (0.9, 2.3)	7.6 (6.2, 9.2)	2.2 (1.5, 3.3)	3.3 (2.3, 4.7)
45-64	7.0 (5.2, 9.3)	3.7 (2.4, 5.7)	3.2 (2.1, 4.9)	0.7 (0.3, 1.8)	8.7 (6.7, 11.2)	0.6 (0.3, 1.3)	2.1 (1.2, 3.4)
65+	1.9 (0.6, 5.9)	3.2 (1.5, 6.6)	1.0 (0.3, 3.3)	0.0	3.7 (1.8, 7.2)	0.0	0.9 (0.2, 4.2)
<i>Residence</i>							
Urban	7.4 (6.1, 9.0)	4.4 (3.4, 5.7)	4.6 (3.4, 6.1)	2.0 (1.3, 2.9)	11.1 (9.5, 13.1)	3.6 (2.6, 4.9)	8.8 (7.2, 10.6)
Rural	1.7 (1.2, 2.5)	1.5 (1.0, 2.3)	1.2 (0.7, 1.9)	0.9 (0.4, 2.1)	4.5 (3.5, 5.8)	0.1 (0.0, 0.2)	2.6 (1.7, 4.0)
<i>Education level</i>							
No formal education	2.1 (1.5, 3.1)	1.9 (1.3, 2.8)	1.2 (0.7, 1.8)	0.3 (0.1, 0.7)	5.2 (4.2, 6.3)	0.0	0.9 (0.5, 1.5)
Elementary school	5.0 (3.4, 7.2)	3.8 (2.4, 5.9)	3.4 (2.0, 5.7)	1.0 (0.4, 2.3)	10.3 (7.9, 13.3)	0.2 (0.1, 0.6)	2.8 (1.7, 4.5)
Middle school	6.5 (4.4, 9.6)	3.3 (1.9, 5.8)	3.5 (2.1, 5.8)	3.0 (1.6, 5.6)	11.5 (8.5, 15.5)	1.2 (0.3, 4.6)	15.3 (11.3, 20.5)
High school	10.1 (6.5, 15.4)	4.2 (2.2, 7.8)	4.9 (2.9, 8.0)	5.3 (2.7, 10.1)	9.7 (6.3, 14.5)	2.3 (1.0, 5.2)	25.1 (19.9, 31.2)
Baccalaureate and more	15.3 (10.6, 21.5)	7.8 (4.1, 14.3)	14.1 (8.6, 22.3)	5.7 (3.3, 9.8)	15.0 (10.3, 21.2)	27.6 (21.4, 34.9)	15.4 (10.4, 22.3)

¹Parmi tous les adultes dans les 30 derniers jours.

Table 7: Percentage of adults over 15 years of age who have been exposed to tobacco smoke in various public places over the past 30 days, by smoking status and selected demographic characteristics - GATS Senegal, 2015

Media supports	Overall	Sex		Age (years)		Residence	
		Male	Female	15 24	25+	Urban	Rural
<i>Percentage (95% CI)</i>							
Overall							
In newspapers and reviews	5.2 (4.4, 6.2)	6.7 (5.4, 8.3)	3.8 (3.0, 4.8)	5.5 (4.1, 7.4)	5.1 (4.1, 6.2)	7.1 (5.8, 8.6)	3.4 (2.4, 4.8)
On TV and radio	41.6 (39.3, 43.9)	41.8 (39.1, 44.6)	41.4 (38.4, 44.4)	38 (34.4, 41.7)	43.4 (40.8, 46.1)	49 (45.8, 52.1)	34.2 (31.0, 37.6)
On TV	26.9 (24.6, 29.4)	26.3 (23.5, 29.2)	27.6 (24.7, 30.7)	26.4 (22.9, 30.3)	27.2 (24.7, 29.9)	39.7 (36.3, 43.2)	14.2 (11.3, 17.6)
On radio	26.8 (24.8, 28.8)	27.4 (24.9, 30.0)	26.2 (23.8, 28.8)	21.4 (18.7, 24.4)	29.5 (27.2, 32.0)	24.5 (21.9, 27.3)	29 (26.2, 32.1)
On billboards	7.6 (6.5, 9.0)	8.9 (7.3, 10.8)	6.4 (5.1, 8.1)	10.1 (8.0, 12.7)	6.3 (5.2, 7.7)	11.8 (9.8, 14.0)	3.5 (2.4, 5.1)
Elsewhere	6.2 (5.2, 7.3)	7 (5.7, 8.7)	5.3 (4.3, 6.6)	7.8 (6.1, 10.0)	5.3 (4.3, 6.6)	8.2 (6.7, 10.1)	4.1 (3.1, 5.6)
All media	46.6 (44.1, 49.0)	47.6 (44.6, 50.5)	45.7 (42.6, 48.8)	45.5 (41.8, 49.3)	47.1 (44.4, 49.9)	55.9 (52.6, 59.2)	37.3 (33.8, 40.9)
Current smokers¹							
In newspapers and reviews	5.2 (3.1, 8.8)	5 (2.8, 8.6)	*	7.5 (1.8, 26.1)	4.7 (2.7, 8.2)	7.5 (4.0, 13.4)	2.6 (0.9, 7.3)
On TV and radio	45.1 (37.8, 52.6)	46.4 (38.8, 54.0)	*	29.6 (13.0, 54.1)	48.4 (40.8, 56.1)	54.1 (44.3, 63.7)	34.6 (24.5, 46.4)
On TV	25.6 (19.7, 32.6)	26.1 (20.1, 33.2)	*	9.8 (3.4, 24.9)	29 (22.3, 36.7)	42.5 (33.1, 52.6)	6 (2.7, 12.9)
On Radio	33.3 (26.7, 40.6)	34.1 (27.3, 41.6)	*	25.2 (9.9, 51.0)	35 (28.3, 42.4)	33.6 (25.5, 42.9)	33 (23.0, 44.8)
On billboards	7.5 (4.5, 12.1)	7.8 (4.7, 12.5)	*	4.8 (1.0, 21.0)	8.1 (4.7, 13.4)	12.1 (6.9, 20.2)	2.2 (0.7, 6.2)
Elsewhere	7.5 (4.6, 12.1)	7.8 (4.8, 12.5)	*	14.8 (5.6, 33.9)	6 (3.4, 10.3)	7.2 (3.5, 14.1)	7.9 (4.0, 15.2)
All media	51.7 (43.9, 59.4)	53.2 (45.2, 61.0)	*	41.9 (22.2, 64.5)	53.8 (45.8, 61.6)	62.7 (52.5, 71.8)	(27.9, 51.3)
Smokers²							
In newspapers and reviews	5.2 (4.4, 6.3)	6.9 (5.5, 8.7)	3.8 (3.0, 4.8)	5.5 (4.0, 7.4)	5.1 (4.1, 6.3)	7 (5.7, 8.6)	3.4 (2.4, 4.9)
On TV and radio	41.4 (39.0, 43.8)	41.3 (38.4, 44.2)	41.5 (38.5, 44.5)	38.2 (34.6, 42.0)	43.1 (40.3, 45.9)	48.7 (45.4, 51.9)	34.2 (30.9, 37.6)
On TV	27 (24.6, 29.5)	26.3 (23.4, 29.4)	27.6 (24.7, 30.8)	26.9 (23.3, 30.8)	27.1 (24.5, 29.9)	39.5 (36.0, 43.1)	14.6 (11.7, 18.1)
On radio	26.4 (24.4, 28.5)	26.6 (24.0, 29.3)	26.3 (23.8, 28.9)	21.3 (18.6, 24.3)	29.1 (26.7, 31.7)	24 (21.3, 26.9)	28.8 (25.9, 31.9)
On billboards	7.6 (6.4, 9.0)	9 (7.3, 11.0)	6.5 (5.1, 8.2)	10.3 (8.1, 12.9)	6.2 (5.1, 7.6)	11.7 (9.8, 14.0)	3.6 (2.4, 5.3)
Elsewhere	6.1 (5.1, 7.3)	7 (5.5, 8.7)	5.4 (4.3, 6.7)	7.6 (5.9, 9.8)	5.3 (4.3, 6.6)	8.3 (6.7, 10.2)	3.9 (2.8, 5.4)
All media	46.3 (43.8, 48.8)	46.9 (43.8, 50.0)	45.8 (42.7, 48.9)	45.6 (41.9, 49.4)	46.6 (43.8, 49.5)	55.5 (52.1, 58.8)	37.2 (33.7, 40.8)

¹Includes current daily and occasional smokers (less than one per day).

²Includes previous and never smokers.

*Indicate suppression of estimates based on unweighted numbers below 25.

Table 8: Percentage of adults aged 15 and over who have noticed anti-cigarette information over the last 30 days on various supports, by smoker status and selected demographic characteristics - GATS Senegal, 2015

Media supports	Overall	Sex		Age (years)		Residence	
		Male	Female	15 24	≥ 25	Urban	Rural
<i>Percentage (IC 95%)</i>							
<i>Has noticed some advertising</i>							
In stores	16.3 (11.8, 22.3)	15.5 (10.9, 21.5)	* -	19.9 (9.0, 38.4)	15.6 (10.7, 22.2)	23.3 (16.1, 32.5)	8.3 (4.1, 16.0)
On TV	3.1 (1.5, 6.4)	3.0 (1.3, 6.5)	* -	3.7 (0.5, 22.6)	3.0 (1.3, 6.4)	5.0 (2.2, 10.9)	0.9 (0.2, 3.6)
On radio	5.0 (2.9, 8.7)	5.0 (2.8, 8.8)	* -	3.7 (0.5, 22.6)	5.3 (3.0, 9.3)	6.3 (3.1, 12.3)	3.6 (1.4, 8.9)
On billboards	7.1 (4.0, 12.1)	7.3 (4.2, 12.6)	* -	4.8 (1.0, 21.0)	7.5 (4.1, 13.4)	10.6 (5.7, 19.0)	2.9 (0.9, 9.1)
On posters	8.0 (4.8, 13.0)	8.3 (5.0, 13.5)	* -	5.5 (1.3, 20.5)	8.5 (5.1, 14.0)	12.7 (7.2, 21.2)	2.6 (0.8, 7.7)
In newspapers and reviews	2.1 (0.8, 5.4)	1.8 (0.6, 5.1)	* -	3.7 (0.5, 22.6)	1.8 (0.6, 5.1)	3.6 (1.3, 9.5)	0.4 (0.1, 2.9)

In movies	0.7 (0.1, 4.5)	0.7 (0.1, 4.7)	* -	0.0	0.8 (0.1, 5.4)	1.2 (0.2, 8.0)	0.0
On Internet	2.1 (0.8, 5.3)	2.1 (0.8, 5.5)	* -	1.2 (0.2, 8.7)	2.2 (0.8, 6.2)	3.8 (1.5, 9.6)	0.0
On vehicles and stations / public transportation	3.3 (1.7, 6.5)	3.2 (1.6, 6.5)	* -	1.1 (0.1, 7.8)	3.8 (1.9, 7.6)	5.1 (2.3, 10.8)	1.3 (0.4, 4.1)
On public place walls	1.8 (0.7, 4.4)	1.9 (0.8, 4.5)	* -	1.1 (0.1, 7.8)	2.0 (0.7, 5.1)	1.1 (0.4, 3.0)	2.7 (0.8, 8.7)
Elsewhere	0.2 (0.1, 0.8)	0.2 (0.1, 0.9)	* -	0.7 (0.1, 4.7)	0.1 (0.0, 0.8)	0.4 (0.1, 1.6)	0.0
Media supports	Overall	Sex		Age (years)		Residence	
		Male	Female	15-24	≥ 25	Urban	Rural
Has noticed sport events associated to cigarette brands or cigarette manufacturing companies	2.0 (0.6, 5.8)	2.0 (0.7, 6.0)	* -	6.6 (1.4, 25.9)	1.0 (0.2, 3.7)	1.5 (0.4, 5.8)	2.5 (0.5, 11.4)
Has noticed cigarette advertisement on music, theater, art or fashion sponsorship events	1.8 (0.5, 5.8)	1.9 (0.6, 6.0)	* -	6.6 (1.4, 25.9)	0.8 (0.1, 4.1)	1.2 (0.2, 6.3)	2.5 (0.5, 11.4)
<i>Has noticed promotions for cigarettes</i>							
Free samples	9.0 (5.6, 14.2)	8.9 (5.4, 14.2)	* -	4.4 (0.8, 21.4)	10.0 (6.0, 16.0)	13.2 (7.9, 21.3)	4.1 (1.2, 12.4)
Discount on prices	4.3 (2.2, 8.1)	4.5 (2.3, 8.4)	* -	3.8 (0.5, 23.0)	4.4 (2.2, 8.7)	7.1 (3.5, 13.9)	1.0 (0.1, 7.0)
Discount coupons	1.8 (0.8, 4.3)	1.9 (0.8, 4.5)	* -	1.1 (0.1, 7.8)	2.0 (0.8, 5.0)	2.2 (0.8, 6.1)	1.4 (0.3, 6.3)
Gifts/special discounts on other products	6.8 (3.9, 11.3)	7.0 (4.1, 11.7)	* -	5.0 (0.9, 24.0)	7.1 (4.1, 12.0)	10.5 (5.8, 18.1)	2.4 (0.7, 8.7)
Cloths/articles bearing the name or logo of a cigarette brand	7.4 (4.3, 12.6)	7.7 (4.4, 13.0)	* -	1.1 (0.1, 7.8)	8.8 (5.0, 14.9)	10.2 (5.2, 18.8)	4.2 (1.6, 10.7)
Promotion by mail	0.1 (0.0, 0.7)	0.1 (0.0, 0.7)	* -	0.0	0.1 (0.0, 0.8)	0.2 (0.0, 1.3)	0.0
Has noticed any advertising, sponsorship or promotion	29.6 (23.2, 36.9)	29.2 (22.8, 36.6)	* -	25.5 (12.8, 44.2)	30.5 (23.4, 38.6)	41.9 (32.0, 52.6)	15.2 (9.3, 23.8)

Table 9: Percentage of Current Smokers Aged 15 Years and Over Who Have Noticed Cigarette Advertising Over the Last 30 Days on Various Media, by Selected Demographic Characteristics - GATS Senegal, 2015

Knowledge, Attitudes and Perceptions: Beliefs about the harmful effects of smoking tobacco use

GATS has collected information on general beliefs among the population aged 15 and over regarding the health effects of tobacco use as well as various diseases caused by tobacco. Results show that the majority of the participants aged 15 and over believes that smoking can cause serious illness (93.9%), lung cancer (92.7%), stomach cancer (75.1%) or heart attack (71.3%). However, fewer adults think that smoking can cause premature birth (60.0%) or bone loss (60.3%). These last two trends remain similar regardless of the demographic characteristic considered, except those who have reached secondary school level or higher. Men's perceptions are almost similar to those of women, as well as current smokers and non-smokers. However, it should be noted that the level of awareness is slightly higher among non-smokers, for all diseases, with the exception of heart attack. In addition, the 65 years old and over age group, and those with no formal education, are less aware of the harmful effects of smoking among their respective demographic categories (Table 10).

Adults who believe that smoking tobacco can cause ...								
Demographic Characteristics	Serious diseases	Stroke	Heart Attack	Lung Cancer	Bladder cancer	Stomach Cancer	Premature birth	Bone loss
<i>Percentage (IC 95%)</i>								
All	93.9 (92.7; 94.8)	67.7 (65.2; 70.0)	71.3 (68.7; 73.8)	92.7 (91.4; 93.8)	65.4 (62.9; 67.8)	75.1 (72.8; 77.2)	60.0 (57.5; 62.5)	60.3 (57.8; 62.7)
<i>Smoking status</i>								
Current smokers	92.5 (88.3; 95.3)	66.1 (58.7; 72.7)	71.9 (65.1; 77.9)	88.1 (81.8; 92.4)	63.5 (55.6; 70.7)	69.6 (61.8; 76.5)	55.2 (47.1; 63.1)	58.7 (51.0; 65.9)
Non-smokers	93.9 (92.8; 94.9)	67.8 (65.3; 70.1)	71.3 (68.6; 73.9)	92.9 (91.7; 94.0)	65.5 (63.0; 68.0)	75.4 (73.1; 77.5)	60.3 (57.7; 62.8)	60.3 (57.9; 62.8)
<i>Sex</i>								
Male	94.2 (92.7; 95.3)	68.6 (65.6; 71.5)	71.9 (68.8; 74.7)	93.2 (91.4; 94.7)	66.8 (63.8; 69.6)	75.8 (73.0; 78.5)	58.8 (55.7; 61.7)	59.7 (56.6; 62.7)
Female	93.6 (92.1; 94.8)	66.8 (63.8; 69.6)	70.8 (67.7; 73.7)	92.1 (90.6; 93.5)	64.1 (61.0; 67.1)	74.4 (71.6; 76.9)	61.2 (58.2; 64.1)	60.8 (57.8; 63.7)
<i>Age (years)</i>								
15-24	93.2 (91.1; 94.8)	68.1 (64.7; 71.3)	70.1 (66.5; 73.5)	91.9 (89.7; 93.6)	63.2 (60.0; 66.3)	75.6 (72.6; 78.4)	58.8 (55.1; 62.3)	58.4 (54.6; 62.0)
25-44	95.4 (94.2; 96.3)	67.7 (64.6; 70.7)	71.8 (68.4; 74.9)	94.1 (92.7; 95.3)	66.8 (63.3; 70.1)	75.1 (72.1; 77.9)	60.8 (57.5; 64.0)	62.0 (58.8; 65.1)
45-64	92.9 (90.7; 94.6)	68.6 (64.2; 72.7)	72.8 (68.9; 76.5)	92.9 (90.7; 94.6)	67.9 (64.0; 71.5)	75.7 (72.1; 79.0)	62.8 (58.6; 66.8)	62.5 (58.7; 66.2)
65+	90.2 (85.2; 93.6)	62.2 (54.9; 68.9)	70.2 (62.6; 76.8)	86.1 (80.2; 90.5)	60.6 (52.9; 67.8)	69.6 (61.7; 76.5)	53.0 (45.2; 60.7)	52.0 (44.6; 59.3)
<i>Place of residence</i>								
Urban	96.5 (95.4; 97.3)	69.9 (66.8; 72.8)	72.4 (69.5; 75.1)	95.5 (94.5; 96.4)	68.0 (65.0; 70.8)	78.3 (75.7; 80.6)	64.6 (61.5; 67.6)	63.8 (60.2; 67.2)
Rural	91.3 (89.2; 93.0)	65.5 (61.7; 69.1)	70.2 (65.8; 74.4)	89.8 (87.4; 91.8)	62.9 (58.9; 66.7)	71.9 (68.2; 75.3)	55.4 (51.5; 59.2)	56.7 (53.4; 60.1)
<i>Level of education</i>								
No formal education	92.0 (90.3; 93.4)	65.3 (61.9; 68.4)	69.4 (65.6; 73.0)	89.5 (87.5; 91.2)	62.9 (59.4; 66.3)	71.0 (67.9; 74.0)	5.6 (51.1; 58.0)	57.0 (54.1; 59.9)
Elementary school	96.3 (94.4; 97.6)	69.7 (65.5; 73.5)	75.1 (71.2; 78.7)	95.4 (93.3; 96.9)	70.8 (66.8; 74.5)	81.4 (77.8; 84.5)	66.7 (62.5; 70.7)	65.7 (61.2; 69.9)
Middle school	93.7 (90.6; 95.8)	68.9 (63.9; 73.5)	70.7 (65.4; 75.6)	96.9 (94.2; 98.4)	62.8 (57.4; 67.9)	77.8 (73.1; 81.9)	59.6 (54.0; 65.0)	58.3 (52.3; 64.0)
High school	99.0 (97.0; 99.7)	75.0 (69.0; 80.1)	74.3 (67.4; 80.2)	98.7 (96.4; 99.6)	69.3 (62.7; 75.2)	82.4 (76.7; 86.8)	72.5 (66.5; 77.9)	66.9 (59.6; 73.5)
Baccalaureate and higher	97.0 (92.9; 98.8)	72.7 (64.2; 79.8)	74.3 (66.5; 80.9)	96.7 (93.1; 98.4)	71.9 (64.7; 78.1)	76.6 (69.7; 82.4)	73.5 (66.2; 79.7)	68.8 (61.5; 75.2)

Table 10: Percentage of adults aged 15 and over who believe that smoking tobacco can cause serious illness, stroke, heart attack, lung cancer, bladder cancer, cancer stomach, premature birth, or bone loss, depending on smoking status and certain demographic characteristics - GATS Senegal, 2015

Discussion

In Senegal, half a million (6%) of adults currently use tobacco products with 11.0% men and 1.2% women. Smoking tobacco is the main form of tobacco use with 5.4% (0.4 million) of adults being current smokers. There was no significant difference in tobacco use between urban (5.8%) and rural (5.0%) areas [2,5-7]. The most common type of smoking tobacco used by adults is manufactured cigarettes, used by 4% of adults (0.3 million) [9]. Slightly more than 7 out of 10 Senegalese (71.6%) aged 20-34 who already smoked daily began before the age of 20. Smoking initiation starts early, before the age of 15, for a quarter of them. Initiation of cigarettes use at a younger age (under 15 years) is more marked in rural areas (36.7%) than in urban areas (15.9%). Overall, 30.4% of workers are exposed to second-hand smoke in indoor workplaces. This figure is reduced to 28.9% among non-smokers (8.9). In overall adult population aged 15 years and older, 7.8% are exposed to second-hand smoke in public transportation. About five in 10 adults (46.6%) have noticed anti-cigarette information from any media (radio, television, poster, etc.) in the last 30 days. Among them, the majority have noticed anti-cigarette information in television or radio (41.6%), followed by billboards (7.6%), elsewhere (6.2%) and in newspapers or magazines (5.2%). Smokers have noticed advertising for cigarettes more frequently in stores (16.3%), followed by posters (8.0%), billboards (7.1%), Radio (5.0%) and public transportation, and stations (3.3%) [10,11]. The percentage of smokers who have noticed sports sponsorship is

2.0%. The type of promotional material most frequently noticed by smokers is free cigarettes samples (9%). Other notable promotional activities include clothes or other items bearing the name or logo of cigarette brands (7.4%), gifts/discounts on other products (6.8%) and discounts on prices (4.3%). The ongoing DHS in Senegal includes a module on tobacco as well as the STEPS survey of 2015. However, the final reports of the ongoing DHS 2015 and the STEPS 2015 are not yet available. For the first time, Senegal has national estimates of smoking and smokeless tobacco use among adults aged 15 and over by sex, age group, residence, and level of education. In addition, indicators are also available on various aspects of tobacco control, such as exposure to second-hand smoke, tobacco-free information and tobacco advertising, and tobacco-related expenditures. Senegal passed a law on packaging, labeling and advertising of tobacco products in March 2014. This new law introduces measures in line with the requirements of the WHO Framework Convention on Tobacco Control (FCTC). It is now forbidden to smoke in public places except hotels, restaurants and airports, provided that smoking rooms requiring technical specifications difficult to meet, are installed in the premises. Offenders are subject to extremely harsh penalties.

The results of this GATS survey help to implement the anti-smoking law and the implementation of the inter-ministerial decrees and related decrees thereto. Moreover, these results make it possible to better guide the tobacco prevention policy of the Ministry of Health and Social Action in Senegal [12,13].

Conclusion

Smoking is a public health issue in Senegal; the analysis of the results of this national survey will help the implementation of the anti-smoking law adopted recently in Senegal.

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