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Knowledge, attitudes and practices in relation to smoking among Burkinabé people residents of Dakar (Senegal) on World No Tobacco Day 2020

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Abstract

Introduction: The study focused on knowledge attitudes and practices vis-à-vis smoking. It was carried out by the 2020 executive office of the Collective of Burkinabé Students in Health in Senegal on World No Tobacco Day 2020. The objective was initially to assess attitudes and practices in relation to smoking smoked by industrial cigarettes and shisha then knowledge of the anti-smoking law and the possibilities of weaning that exist in Senegal and finally to know the best attitude to fight against smoking.

Methods: This was a descriptive cross-sectional study for analytical purposes. The sampling technique was voluntary and data collection was self-administered and took place from Monday May 25th to Saturday May 30th, 2020 via electronic questionnaires.

The self-administered data collection technique reduced prevarication and social desirability bias. However, the lack of preliminary calculation of a sample size makes inferences in the general population difficult. The sampling technique that was voluntary exposes itself to self-selection biases. Nevertheless, the study does suggest some very important aspects of smoking among young people.

Results: This study shows that shisha is increasingly becoming the gateway to smoking among young people. It reveals that the health warnings on industrial cigarette packages are less and less dissuasive. It also shows that our study population believes that the two priority actions to be carried out to fight effectively against smoking in Senegal are on the one hand "to improve the offer of help for smoking cessation" and on the other hand " rigorously apply the punitive aspects of the anti-smoking law".

Conclusion: Smoking is a global epidemic that increasingly affects young people. Tobacco control is multidimensional and requires perfect synchronization of the different actors and continuous assessment of the effectiveness of control and prevention methods.

Keywords: Cigarette, Shisha, Youth, Anti-tobacco control, Senegal

INTRODUCTION

The World Health Organization (WHO) says: "The tobacco epidemic is one of the most serious threats to ever weigh on global public health" [1]. Tobacco kills up to half of those who use it [1].

The United Nations 2015-2030 sustainable development goals establish two targets for tobacco control. On the one hand, target 3.5. which aims to strengthen the prevention and treatment of psychoactive substance abuse, including narcotics and alcohol [2,3]. On the other hand, target 3.a. which aims to strengthen in all countries, as appropriate, the implementation of the World Health Organization Framework Convention on Tobacco Control [2,3].

As every year, May 31th is celebrated the World No Tobacco Day. Year 2020 focused on the protection of the younger generations, with the main theme "Protecting young people against industrial manipulation and preventing them from consuming tobacco and nicotine" [4].

It is with all this that the 2020 executive office of the Collective of Burkinabé Students in Health in Senegal conducted this present study on smoking. The aim was to assess the knowledge, attitudes and practices of Burkinabe people living in Dakar (Senegal) in relation to smoking through the following specific objectives:

Describe knowledge about industrial cigarette smoking and shisha.

Describe attitudes on industrial cigarette smoking and shisha.

Describe the expectations for tobacco control.

Identify statistical links between gender and knowledge and attitudes about smoking.

Identify statistical links between age and knowledge and attitudes about smoking.

METHODOLOGY

The study setting was the Dakar region in Senegal. It was a descriptive cross-sectional study with an analytical aim. The investigation took place from Monday, May 25th, 2020 at 00:00 a.m. to Saturday, May 30th, 2020 at 12:00 p.m. The target population was the Burkinabé people resident in Dakar (Senegal). The inclusion criteria were: being Burkinabé , being between 18 and 60 years old, living in the Dakar region in Senegal, have a smartphone, have a whatsapp account and being agree to participate in the survey. Participation was voluntary via an electronic questionnaire generated by Google forms. The link to the questionnaire was sent to the various Whatsapp groups of Burkinabé students from universities that are members of the Burkinabé Student Health Collective. Everyone was then free to forward the link to anyone meeting the inclusion criteria.

The questionnaire first addressed socio-demographic aspects with age, sex, profession. Then came the aspects related to knowledge with the existence or not of an anti-tobacco law, a smoking cessation center and finally the aspects related to attitudes and practices. This part was about the circumstance during the first tobacco consumption, the age at the time of the first consumption of cigarettes and shisha, the frequency of consumption of industrial cigarettes and shisha, understanding of the harmfulness of industrial cigarettes and shisha, frequency and place exposure to passive smoking, the possibility of quitting without outside help, the visibility of health warnings, their dissuasive nature and the best attitude necessary for the fight against tobacco.

Compliance with the ethical framework was achieved through a clear, complete and precise information text that presented the context and the purpose of the study for the free and informed consent of the participants. In addition, data collection was anonymous and self-administered and access to data which was limited exclusively to the analyst allowed data confidentiality.

Data collection was self-administered. Data analysis was performed on Rstudio version 4.0.2 analysis software and had constituted a descriptive and bi-varied analysis. Qualitative variables were expressed as absolute and relative frequencies. Quantitative variables were expressed as the mean and standard deviation if the distribution was normal otherwise using the median and extreme values. The bivariate analysis consisted of a comparison of unpaired proportions and unpaired means.

Comparison of unpaired proportions: The objective was to investigate the existence of a statistically significant relationship between the dependent variable and the explanatory variable. This link was retained as statistically significant for a p-Value ≤ 0.05. This link was sought with the appropriate statistical test according to its conditions of applicability. Thus we used either the parametric test Chi 2 of Pearson, if all the theoretical values were greater than or equal to 5, or the parametric test of Chi 2 corrected by Yates, if at least one of the theoretical values was between 3 and 5, or the nonparametric test of Fischer, if at least one of the theoretical values was strictly lower than 3.

Comparison of two unpaired means: the objective was to find the existence of a statistically significant association between the two variables. This link was retained as statistically significant for a p-Value ≤ 0.05. This link was sought with the appropriate statistical test according to its conditions of applicability. We used either the parametric Student's T test, if on the one hand there was a normal distribution of the quantitative variable in the strata of the dichotomous dependent qualitative variable and on the other hand if their variances were homogeneous, or the Welch's parametric T test, if on the one hand there was a normal distribution of the quantitative variable in the strata of the dichotomous dependent qualitative variable but only their variances were non-homogeneous, or the non-parametric Wilcoxon MW test if the distribution of the quantitative variable in the strata of the dichotomous dependent qualitative variable was abnormal

Comparison of more than two unpaired means: the objective was to find the existence of a statistically significant relationship. The presence of a statistically significant link was retained for a p-Value≤0.05. This link was sought with the appropriate statistical test according to its conditions of applicability: either the ANOVA test, if normal distribution and homogeneous variance, or the K. Wallis test if only one of the conditions of normality and homogeneity of variances was missing.

RESULTS

Socio-demographic characteristics: In total, 352 individuals took part. Women were in the majority with 57.7% (Table 1). The median age was 22.5 years with a minimum age of 18 and a maximum age of 52. The mean age was 23.5 years with a standard deviation of 4.92 years. The 20-25 age group was in the majority with 48.3% (Table 1). The student profession was mainly represented with 87.5% (Table 1).

Table 1 : Description of socio-demographic characteristics, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, from May 25 to 30, 2020, on the occasion of World No Tobacco Day, N = 352.

Variables and modalities	Absolute frequencies (n)	*Relative frequencies (%)*
Sex		
Women	203	*57.7*
Man	149	*42.3*
Age groups		
<20	82	*23.3*
20-25	170	*48.3*
25-30	64	*18.2*
30-35	9	*2.6*
> 35	11	*3.1*
Missing data	16	*4.5*
Profession		
College Student	1	*0.3*
University Student	308	*87.5*
Unemployed	4	*1.1*
Formal sector	35	*9.9*
Informal sector	4	*1.1*

Circumstances, age of the first tobacco consumption, frequency of consumption and understanding of the harmful effect of industrial cigarettes, shisha: The most common circumstance during the first tobacco consumption was curiosity with 28.4% followed by the influence of a third party with 7.4% (Table 2). The first industrial cigarette consumption was most between 15 and 20 years old with 15.06% and never took place after 25 years (Table 2). The first consumption of shisha was made most between 15 and 20 years with 28.7% and never before 10 years (Table 2). The two most represented frequency modalities of industrial cigarette consumption were “Rarely” with 7.95% and “Daily” with 3.41% (Table 2). The two most represented frequency modalities of shisha consumption were "Rarely" with 21.6% and "Occasionally" with 6.2%. Daily shisha consumption did not exist (Table 2). They were 8.81% to maintain that the consumption of industrial cigarettes only became harmful for regular and quantitative consumption (Table 2). They were 11.9% to maintain that the consumption of shisha only became harmful for regular and quantitative consumption (Table 2).

Table 2: Description of the circumstances, age of the first tobacco consumption, frequency of consumption and understanding of the harmful effect of industrial cigarettes, shisha study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, May 25-30, 2020, on the occasion of World No Tobacco Day, N = 352.

Variables and modalities	Absolute frequencies (n)	*Relative frequencies (%)*
Circumstances and age of first tobacco consumption		
Circumstance first tobacco consumption		
Never smoked	208	*59.1*
Curiosity	100	*28.4*
Happy events	8	*2.3*
Unfortunate events	5	*1.4*
Media	1	*0.3*
Influence of a third party	26	*7.4*
Other	4	*1.1*
Age groups in years when first consuming industrial cigarettes		
Never	237	*67.3*
<10	8	*2.3*
10-15	44	*12.5*
15-20	53	*15.1*
20-25	10	*2.8*
25-30	0	*0*
> 30	0	*0*
Age groups in years when first consuming shisha		
Never	198	*56.2*
<10	0	*0*
10-15	7	*2.0*
15-20	101	*28.7*
20-25	43	*12.2*
25-30	2	*0.6*
> 30	1	*0.3*
Frequency of consumption and likelihood of the harmful effects of industrial cigarettes and shisha		
Frequency of industrial cigarette consumption		
Never	301	*85.5*
Rarely	28	*8.0*
Sometimes	6	*1.7*
Often	5	*1.4*
Daily	12	*3.4*
Shisha consumption frequency		
Never	242	*68.8*
Rarely	76	*21.6*
Sometimes	22	*6.2*
Often	12	*3.4*
Daily	0	*0*
Understanding according to the harmfulness of industrial cigarettes		
Never harmful	3	*0.9*
From the start of consumption	182	*51.7*
For regular consumption	136	*38.6*
For both regular and quantitative consumption	31	*8.8*
Understanding according to the harmfulness of the shisha		
Never harmful	7	*2.0*
From the start of consumption	178	*50.6*
For regular consumption	125	*35.5*
For both regular and quantitative consumption	42	*11.9*

Frequency, place of exposure, attitude adopted in the event of passive smoking and knowledge about tobacco control: The two frequency modalities of exposure to second-hand tobacco smoke were "Rarely" at 37.5% and "Occasionally" at 30.7% (Table 3). The two most represented modalities for the place of exposure to second-hand tobacco smoke were "Public place" with 57.9% and "Discotheque / Bar" with 21.3% (Table 3). The most prevalent attitudes when exposed to second-hand tobacco smoke were "I walk away without saying anything" with 61.4% and "I endure in silence" with 17.0% (Table 3). About, visibility of health warnings on industrial cigarette packages,

91.2% of them noticed the health warnings on industrial cigarette packages (Table 3). They were 52.3% affirming that a law against smoking exists (Table 3). They were 60.5% to affirm that smoking cessation was possible without any outside help (Table 3). They were 51.1% to affirm that there is no smoking cessation center in Senegal (Table 3). The two most represented modalities regarding the dissuasive nature of health warnings on cigarette packs were " Little dissuasive " with 44.3% and "Not dissuasive" with 26.4% (Table 3). When asked "what is the best attitude to fight against smoking", they were in descending order, Improve the offer of help with smoking cessation with 28.7%; a rigorous application of the punitive aspects of the anti-smoking law for 27.3% ; 22.7% preferred an increase in awareness and the increase in tobacco sales prices came last with 21.3% (Table 3).

Table 3 : Description of the frequency, place of exposure, attitude adopted in the event of passive smoking and knowledge about tobacco control, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, May 25-30, 2020, on the occasion of World No Tobacco Day, N = 352.

Variables and modalities	Absolute frequencies (n)	*Relative frequencies (%)*
Frequency, place of exposure and attitude adopted in the event of passive smoking		
Frequency of exposure to second-hand tobacco smoke		
No	34	*9.7*
Rarely	132	*37.5*
Sometimes	108	*30.7*
Often	62	*17.6*
Daily	16	*4.5*
Place of exposure to second-hand tobacco smoke		
Disco / Bar	75	*21.3*
Home	43	*12.2*
Public space	204	*58.0*
Workplace	17	*4.8*
Restaurant	9	*2.6*
Public transport	4	*1.1*
Attitude when exposed to second-hand tobacco smoke		
That does not bother me	26	*7.4*
I endure in silence	60	*17.0*
I walk away without saying anything	216	*61.4*
I make him understand my embarrassment	48	*13.6*
I denounce it to the nearest policeman	2	*0.6*
Knowledge about tobacco control		
Possibility of smoking cessation without outside help		
No	139	*39.5*
Yes	213	*60.5*
Visibility of health warnings on industrial cigarette packages		
No	31	*8.8*
Yes	321	*91.2*
Dissuasive nature of health warnings on industrial cigarette packages		
Not dissuasive	93	*26.4*
Little dissuasive	156	*44.3*
Moderately dissuasive	78	*22.2*
Very dissuasive	25	*7.1*
Existence of an anti-smoking law in Senegal		
No	168	*47.7*
Yes	184	*52.3*
Existence of a smoking cessation center		
No	180	*51.1*
Yes	172	*48.9*
The best attitude for the fight against tobacco		
Increase the selling prices of tobacco	75	*21.3*
Increase awareness	80	*22.7*
Enforce punitive laws	96	*27.3*
Improve the offer of help with smoking cessation	101	*28.7*

The bivariate analyzes revealed: On the one hand, 3 independent variables that showed a statistically significant relationship with gender. They were: the circumstance of the first tobacco consumption (p-Value <0.001), the age interval in years at his first industrial cigarette consumption (p-Value <0.001), the age interval in years when consuming shisha for the first time (p-Value <0.001) (Table 4).

Table 4: Bivariate analyzes between the dependent variables sex and age with the independent variables circumstances and age of first tobacco consumption, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal , from May 25 to 30, 2020, on the occasion of World No Tobacco Day, N = 352 .

Variables and modalities	**SEX**					**AGE**		
	Woman		Man		p-Value	Average	Standard deviation	p-Value
	Effective	%	Effective	%				
Circumstance first tobacco consumption					<0.001			0.385
Other	1	*25*	3	*75*		25.8	0.5	
Curiosity	42	*42*	58	*58*		24.0	5.3	
Happy event	0	*0*	8	*100*		22.4	1.5	
Never smoke	152	*73*	56	*27*		23.2	4.6	
Unfortunate event	3	*60*	2	*40*		22.4	2.7	
Media influence	0	*0*	1	*100*		-	-	
Influence of a third party	5	*19*	21	*81*		25.2	7.0	
Age interval in year of his first industrial cigarette consumption					<0.001			
Never smoke	164	*69*	73	*31*		-	-	
<10	4	*50*	4	*50*		-	-	
10-15	11	*25*	33	*75*		-	-	
15-20	20	*38*	33	*62*		-	-	
20-25	4	*40*	6	*60*		-	-	
25-30	0	*0*	0	*0*		-	-	
> 30	0	*0*	0	*0*		-	-	
Age interval in years when first consuming shisha					<0.001	-	-	
Never smoke	134	*68*	64	*32*		-	-	
<10	0	*0*	0	*0*		-	-	
10-15	7	*100*	0	*0*		-	-	
15-20	45	*45*	56	*55*		-	-	
20-25	17	*40*	26	*60*		-	-	
25-30	0	*0*	2	*100*		-	-	
> 30	0	*0*	1	*100*		-	-	

The bivariate analyzes revealed: On the other hand, an independent variable that showed a statistically significant relationship with age. This was the efficiency according to the harmfulness of the consumption of industrial cigarettes (p-Value = 0.023) (Table 5).

Table 5: Bivariate analyzes between the dependent variables sex and age with the independent variables understanding of the harmfulness of the consumption of industrial cigarettes, shisha, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, May 25-30, 2020, on the occasion of World No Tobacco Day, N = 352.

Variables and modalities	SEX					AGE		
	Woman		Man		p-Value	Average	Standard deviation	p-Value
	Effective	%	Effective	%				
Understanding according to the harmfulness of industrial cigarette consumption					0.5			0.023
Never harmful	1	*33*	2	*67*		27.3	8.7	
From the start of consumption	105	*58*	77	*42*		24.2	5.7	
For regular consumption	76	*56*	60	*44*		22.8	3.8	
For both regular consumption and Quantitative	21	*68*	10	*32*		22.7	3.7	
Understanding according to the harmfulness of the consumption of shisha					0.2			0.248
Never harmful	2	*29*	5	*71*		23.0	4.4	
From the start of consumption	109	*61*	69	*39*		24.1	5.7	
For regular consumption	72	*58*	53	*42*		23.0	4.0	
For both regular consumption and Quantitative	20	*48*	22	*52*		23.1	3.5	

The bivariate analyzes revealed: Finally 5 independent variables that had both a statistically significant relationship with sex and age. These were the place of exposure to second-hand tobacco smoke with respectively p-value = 0.048 and p-Value <0.001 (Table 6), the attitude adopted in the event of exposure to second-hand tobacco smoke with respectively p-value = 0.001 and p-Value = 0, 013 (Table 6).

Table 6: Bivariate analyzes between the dependent variables sex and age with the independent variables place of exposure and attitude adopted in the event of passive smoking, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, May 25-30, 2020, on the occasion of World No Tobacco Day, N = 352 .

Variables and modalities	SEX					AGE		
	Woman		Man		p-Value	Average	Standard deviation	p-Value
	Effective	%	Effective	%				
Place of exposure to second-hand tobacco smoke					0.048			<0.001
Disco / Bar	42	*56*	33	*44*		23.1	4.1	
Home	17	*40*	26	*60*		23.2	3.6	
Public space	124	*61*	80	*39*		23.3	4.7	
Workplace	9	*53*	8	*47*		29.0	9.8	
Restaurant	7	*78*	2	*22*		23.1	3.7	
Public transport	4	*100*	0	*0*		23.5	4.1	
Attitude adopted in the event of exposure to second-hand tobacco smoke					0.001			0.013
That does not bother me	7	*27*	19	*73*		25.0	7.0	
I endure in silence	30	*50*	30	*50*		24.8	6.5	
I walk away without saying anything	134	*62*	82	*38*		22.8	4.2	
I make him understand my embarrassment	32	*67*	16	*33*		24.5	4.0	
I denounce it to the nearest policeman	0	*0*	2	*100*		23.0	0.0	

The bivariate analyzes revealed: Knowledge of the existence of an anti-smoking law in Senegal with respectively p-value = 0.006 and p-Value = 0.014 (Table 7), the thought that weaning is possible without external help with respectively p-value <0.001 and p-Value = 0.005 (Table 7), the knowledge of the existence of a weaning center with respectively p-value <0.001 and p-Value = 0.023 (Table 7).

Table 7: Bivariate analyzes between the dependent variables sex and age with the independent variables of knowledge on the fight against tobacco, study by the Collective of Burkinabé Students in Health in Senegal on the knowledge, attitudes and practices of Burkinabé residents in Dakar, Senegal, from May 25 to 30, 2020, on the occasion of World No Tobacco Day, N = 352.

Variables and modalities	SEX					AGE		
	Woman		Man		p-Value	Average	Standard deviation	p-Value
	Effective	%	Effective	%				
Possibility of smoking cessation without outside help					<0.001			0.005
No	96	*69*	43	*31*		22.6	4.1	
Yes	107	*50*	106	*50*		24.2	5.3	
Visibility of health warnings on industrial cigarette packages					0.8			0.100
No	19	*61*	12	*39*		22.2	3.5	
Yes	184	*57*	137	*43*		23.7	5.0	
Dissuasive nature of health warnings on industrial cigarette packages					0.7			0.046
Not dissuasive	56	*60*	37	*40*		23.8	4.7	
Little dissuasive	85	*54*	71	*46*		23.2	4.2	
Moderately dissuasive	46	*59*	32	*41*		23.1	5.1	
Very dissuasive	16	*64*	9	*36*		26.0	8.1	
Existence of an anti-tobacco law in Senegal					0.006			0.014
No	110	*65*	58	*35*		22.9	4.1	
Yes	93	*51*	91	*49*		24.2	5.5	
Existence of a smoking cessation center in Senegal					<0.001			0.023
No	121	*67*	59	*33*		23.0	4.3	
Yes	82	*48*	90	*52*		24.2	5.5	
Better attitude for tobacco control					<0.001			0.449
Increase the selling prices of tobacco	29	*39*	46	*61*		23.5	5.2	
Increase awareness	44	*55*	36	*45*		23.8	5.9	
Enforce punitive laws	57	*59*	39	*41*		24.0	5.0	
Improve the offer of help with smoking cessation	73	*72*	28	*28*		22.9	3.6	

DISCUSSION

Our study was more reflective of youth and student aspects (71.6% were between 18 and 25 years old and 87.5% were students). Regarding the gateway to tobacco consumption: Before the age of 15, tobacco consumption began more through industrial cigarettes (14.8%) than through shisha (2%) . After 15 years, this trend was reversed, smoking began more through shisha. And the first consumption of tobacco through industrial cigarettes did not take place after 25 years, unlike shisha. We can therefore say that the risk of starting tobacco use with shisha extends much more over time and is intense after the age of 15 years.

Regarding the frequency of tobacco consumption (industrial cigarette vs shisha), it appears that daily consumption existed only for the consumption of industrial cigarettes (3.4%). But for all the other frequency modalities, the consumption of shisha was the most represented with "Rarely" 21.6%, "From time to time" 6.2%, "Often" 3.4%. It

therefore appears that the consumption of shisha seems more popular without however requiring daily consumption.

Regarding the understanding for the harmfulness of the consumption of tobacco by industrial cigarette vs by shisha, they were more numerous who affirmed that the consumption of shisha only became harmful for regular and quantitative consumption (11,9 %) than who affirmed that the consumption of industrial cigarettes only became harmful for regular and quantitative consumption (8.8%). So it seems that consumption of shisha seemed to be little less dangerous in the minds of our population.

According to the place of exposure to second-hand tobacco smoke, the top three were, in descending order, public space (58%), nightclubs / bar (21.3%) and home (12.2%). However, there is a law in Senegal which prohibits smoking in public places [5,6]. It should also be noted that the location of exposure to second-hand tobacco smoke had both a statistically significant relationship with gender and age (p-value = 0.048 and p-value <0.001).

When exposed to second-hand tobacco smoke, the majority simply walked away in silence (61.4%), very few reported the smoker to the nearest security force (0.6%). But what is serious is that up to 7.4% said they were not embarrassed and up to 17% supported without saying anything. This is inconceivable when you know that passive smoking is just as dangerous as active smoking. Moreover, in a bivariate analysis, the attitude adopted in the event of exposure to second-hand tobacco smoke had both a statistically significant relationship with sex (p-value = 0.001) and age (p- Value = 0, 013).

About the existence of a law in force against smoking in Senegal, they were the majority (52.3%) to affirm that it exists. This is a reassuring point. But highlights the problem of its application: why does nobody bring it to life, why do people not use the rights that flow from this law? In addition, knowledge of the existence of an anti-smoking law in Senegal is one of the independent variables that had both a statistically significant relationship with sex (p-value = 0.006) and age (p-Value = 0.014).

Regarding the dissuasive nature of health warnings on industrial cigarette packets, our study reveals that 44.3% said this was not very dissuasive and even not dissuasive with 26.4%. The messages these numbers suggest are clear. On the one hand, let's invest more elsewhere than in health warnings, on the other hand, dependence outweighs the deterrence of health warnings.

They were 60.5% to affirm that smoking cessation was possible without outside help. As if to say that stopping smoking depends above all on the will of the person in question. First, it is a battle between the tobacco user and his addiction. In addition, the thought that smoking cessation is possible without outside help was dependent on both gender (p-value <0.001) and age (p-Value = 0.005).

Regarding the best attitude for tobacco control, the two leading attitudes were to strengthen the offer of smoking cessation with 28.7% and rigorously apply punitive tobacco control laws with 27.3% . As if to say, let's apply punitive laws without any qualms that will protect non-smokers and force smokers to quit. But at the same time let us give the possibility to the smokers to have assistance to get rid of this drug. Because leave it to themselves, they don't seem to be able to do it. The addiction is persistent.

The issue of weaning assistance is really a problem to be solved, because the study also reveals that the majority (51.1%) are unaware of the existence of the Dakar integrated care center for addictologies [7,8] which has human and material resources for support in smoking cessation in Senegal. In addition, in bivariate analysis, knowledge of the existence of a smoking cessation center presented a statistically significant relationship with both sex (p-value <0.001) and age (p-Value = 0.023) .

CONCLUSION

First, shisha is the danger of smoking in our sample of young people and students, then, the rigorous application of the anti-smoking law is seriously lacking and finally help with smoking cessation is strongly requested for the fight against tobacco.

The resulting recommendations are: on the one hand that the national tobacco control program in Senegal and the Dakar integrated care center for addictologies should work together for greater reciprocal efficiency and on the other hand the health authorities with the police forces must enforce the anti-smoking law everywhere with rigor and constancy. These two aspects will increase our chances of having a tobacco-free Senegal.

Conflicts of interest

The authors declare no conflict of interest

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