

Prevalence and Pattern of Smoking Among Youths in Ilorin East Local Government Area, Kwara State, Nigeria

Barakat Olajumoke Kolawole ¹, Darlington Chukwuma Ugwu ², Yusuf Funsho Issa ¹,
Abubakar Umar ³, Taofik Oluwatobi Sulaiman ⁴, Ridwan Ayodele Akanmu ⁵,
Fatima Abdulwahab ⁴, Yahaya Kayode Abdulrahman ⁴, Glory Deborah Omole ⁶

¹ *Kwara State University*

P. M. B. 1530 Ilorin, 23431, Malete, Kwara State, Nigeria

² *Nigeria Centre for Disease Control and Prevention*

Plot 801, Ebitu Ukiwe Street, Jabi, Abuja, Nigeria

³ *Gombe State Ministry of Health*

Government House, GRA Road, Pantami, Gombe State, Nigeria

⁴ *Usmanu Danfodiyo University, Sokoto*

P. M. B. 2346, Sokoto, Nigeria

⁵ *University of Maiduguri Teaching Hospital*

Bama road, Maiduguri, Borno State, Nigeria

⁶ *Southern Illinois University, Edwardsville*

Campus Box 1015, Edwardsville, Illinois, 62026-1015, USA

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Corresponding Author:

Barakat Olajumoke Kolawole

kolawolebarakat2@gmail.com

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Abstract. Scientific research has associated smoking with a wide variety of health problems, including reduced life expectancy. An estimated 4 million people worldwide die from smoking cigarettes each year. Between February and March 2020, 300 youths in Ilorin East LGA participated in a descriptive cross-sectional study. Researchers regarded a p-value of less than 0.05 ($p < 0.05$) as statistically significant and maintained a 95% confidence level. They found that the respondents had a mean age of 23.6 ± 4.7 years, with nearly half (42.3%) falling in the 21–25 age range and approximately two-thirds (77.3%) female. With a mean age of 23.6 ± 4.7 years, nearly half of the respondents (42.3%) are in the 21–25 year age range, and roughly two-thirds (77.3%) are female. About half of the respondents (49.3%) smoke, with half of them smoking once a week (49.3%); nearly three-quarters of the respondents (73.3%) and (70.0%) had positive attitudes and knowledge regarding cigarette smoking. Most respondents (9.7%) agreed that their religion prohibits smoking, while 85.3% believed that peer pressure. The majority of respondents (9.7%) acknowledged that their religion prohibits smoking, and 85.3% agreed that peer pressure plays a role in encouraging young people to smoke. The respondents' smoking habits and sociodemographic characteristics correlate significantly ($p < 0.05$). The majority of the youth in this survey who smoked had good knowledge and attitudes toward tobacco cigarettes, with a 49.3% prevalence rate. Religious beliefs, peer pressure, and parental smoking are all associated with the habit of smoking. A statistically significant correlation ($p < 0.05$) exists between the respondents' smoking behaviour and sociodemographic traits.

Keywords: Prevalence; Tobacco; Cigars; Smoking; Recreational drug; Youths.

INTRODUCTION

Smoking is the act of burning substances such as cigars, tobacco, cannabis, marijuana, and other similar compounds and inhaling or tasting the resulting smoke. It seems that one of the most popular ways that people consume drugs recreationally is by smoking. According to recent estimates, over a billion people smoke tobacco products worldwide, making it the most common kind of smoking compared to other products, including pipes, cigars, and chewing tobacco [1]. However, cigarettes became the most popular form of smoking in the globe during the 20th century, contributing to the global lung cancer epidemic [2]. Notably, distinct diffusion patterns of cigarette smoking have been recorded across international cultures, with the early adoption by high-income Western countries and the later uptake in many middle- and lower-income countries [2].

According to the Global Youth Tobacco Survey (2002), 15% of young people smoked in 4 out of 29 sites in the African region, 13 out of 38 sites in the American region, 1 out of 23 sites in the Eastern Mediterranean region, 15 out of 29 sites in the European region, 1 out of 10 sites in South East Asia, and 13 out of 22 sites in the West Pacific region [3]. Owonaro and Eniojukan (2015) observed a marginal yearly increase of approximately 3% in the prevalence of cigarette smoking in developing countries. It is important to note that young people are exposed to cigarette smoking at a younger age and become addicted to it because of its addictive nature [4].

According to authors [5], there have been multiple reports of fluctuating rates of rising smoking prevalence in Nigeria, depending on the location, rural or urban. Nonetheless, according to specific research conducted in Nigeria [5], the prevalence of uses ranges from of tobacco 3.4% to 17.1% [6]. For example, authors [7] found that smoking prevalence among students in secondary schools is about 9%, with a mean lifetime smoking prevalence ranging from 7.2% to 42.9%. Several reasons, including the tobacco firms' effective marketing tactics and the general lack of knowledge about the risks involved in smoking, have contributed to the rising rate of cigarette smoking [8]. Furthermore, smoking cigarettes has been linked to a wide range of health issues and a shorter average lifespan [9]. As a result, smokers typically lose fifteen years of their lives, and 4 million smokers pass away globally each year [3].

In addition, several studies have suggested that cigarettes might be the first drug that young people use, followed by marijuana, alcohol and hard drugs. As a result, it is unlikely that anyone who does not start smoking cigarettes by the age of 20 will go on to smoke [10].

Nonetheless, research indicates that various spheres of influence, including personal, social, communal, and others, impact modifications in behaviour, especially among adolescents. The psycho-social construct of the behaviour in question, whether it takes the shape of individual ideas, opinions, subjective norms, or social norms, should be recognised as one common element that functions at the levels above impact. As a result, this shows that one of the main risk factors that may encourage or discourage teenagers from taking up smoking is how they see smokers on a personal, interpersonal, and social level [11]. Consequently, authors [12] reported smoking damages almost all of the body's organs and progressively lowers the quality of life. Studies have shown that Nigerians smoke more frequently, with youth making up the bulk of smokers [6], supporting the idea that smokers in Nigeria are more prone to developing lung diseases.

METHOD

Study area: Ilorin is located in Kwara state, North-central Nigeria. Most of the inhabitants engaged in farming. In the state, several youths exist in every group, including the marketplace, joints, motor parks, streets and others. Cigarettes and other tobacco are sold at small shops, rail stations, bars, motor parks, marketplaces and other busy areas within the state.

Study population: Youths aged 15 to 35 who have been residents in Ilorin East LGA, Kwara state, in the last 8 months and above, irrespective of gender, are following the survey.

Study Design: A descriptive, cross-sectional, mixed-methods study design. Sample size estimation: The researchers estimated the sample size using a power of 95% and a level of precision set at 1.96 to account for non-response. They determined that the minimum sample size required was 300.[13].

Method of Sampling. The researchers chose the respondents for this study using a multistage sampling technique, dividing the selection process into three phases as follows:

Stage 1: Simple random sampling techniques by balloting method without replacement were used to select 100 compounds for the study.

Stage 2: The researchers used a simple random sampling technique with a balloting method without replacement to select 100 households from the compounds chosen for the study. They applied proportional allocation to distribute the sample size across the selected compounds, ensuring at least four respondents per household.

Stage 3: The necessary number of houses in each compound was chosen using a systematic random sampling technique, with the sample frame being a list of all the houses in the selected compound. To determine the sampling interval (K), the researchers divided the total number of dwellings in each compound by the allotted fraction of the sample size. When a respondent in a selected household declined consent or met any exclusion criteria, the researchers randomly assigned the next household on the sampling frame until they reached the desired sample size. The researchers randomly chose the first household and then used the Kth interval and the list of households to recruit the desired sample size for this study.

Quantitative data instruments of data collection. A semi-structured, interviewer-administered questionnaire was used. The questionnaire was developed and adapted from the reviewed literature. It was used to collect information on the sociodemographic characteristics, Patterns, Prevalence, level of knowledge, health risk perception and Factors influencing smoking among youths in GAMBARI Ilorin East LGA, Kwara State. The questionnaire was divided into sections A, B, C, D and E.

Method of Data Collection. All eligible respondents were given a thorough explanation of the goal and significance of this study before the researcher, assisted by four qualified research assistants, began data collecting. The researcher and their assistants translated the questionnaire into Yoruba to assess the respondents' literacy level before translating it into English to gather information. The confidentiality and anonymity of the collected data were guaranteed and upheld.

Data Analysis. The questionnaires were collated and thoroughly checked for completeness and consistency. The raw data from the field was organised and coded for analysis. The researchers

did not use incomplete and inaccurate questionnaires in the study. The data was analysed using Statistical Package for Social Sciences (SPSS), and results were presented using descriptive statistics like mean, frequencies, percentages, and frequency tables. The chi-square test was used to describe any association between categorical variables, and the significance level was set at $p < 0.05$.

The researchers used a two-point Likert scale to score and grade replies on knowledge about smoking cigarettes (1 being yes and two being no). One mark was given for each accurate knowledge response, whereas zeros were given for inaccurate or no response. Ten points was the highest possible score, and zero was the lowest. The total scores were multiplied by 10 to get the corresponding percentage, which is 100%. The researchers ranked the respondents' knowledge as fair, poor, or reasonable. A score of 0 to 40% was considered low, 41% to 69% was considered fair, and a score of 70% to 100% was regarded as solid knowledge. Following the scoring process, the average knowledge scores of the participants and the percentage of participants with.

RESULTS AND DISCUSSIONS

In the quantitative study, the researchers administered 300 questionnaires to eligible respondents and successfully retrieved all of them, achieving a 100% response rate. They then analysed the completed questionnaires, presenting the findings as follows.

Close to half of the respondents 127, accounting for about 42.3%, are within the age group of 21-25 years with a mean age of 23.6 ± 4.7 years, and about two-thirds 232 constituting (77.3%) are females. Approximately two-thirds of respondents (180, or 60.0%) are single, while more than two-thirds (207, or 69.0%) practice Islam. Also, more than half of the respondents, 164 (54.7%), had primary education, and far less than one-tenth 4 (1.3%) had tertiary education. Moreover, 74.0% of the respondents, constituting two-thirds (222), are of the Yoruba ethnic group, and almost half of the respondents (138) (46.0%) are apprentices by occupation. Lastly, more than two-thirds of respondents' fathers, 189 (63.0%), had non-formal education, while close to half of the respondent's mothers 122 (40.7%) had primary education (Table 1).

Table 1 - Sociodemographic characteristics of respondents (n = 300)

Variables	Frequency	%
Age group (years)		
15-20	68	22.7
21-25	127	42.3
26-30	79	26.3
31-35	26	8.7
Total	300	100.0
Gender		
Male	68	22.7
Female	232	77.3
Total	300	100.0
Marital Status		
Single	180	60.0
Married	44	14.7
Separated	36	12.0
Widowed	17	5.7
Divorced	23	7.7
Total	300	100.0
Religion		
Christianity	83	27.7
Islam	207	69.0
Traditional	10	3.3
Total	300	100.0
Education		
Non-formal	70	23.3
Primary	164	54.7
Secondary	62	20.7
Tertiary	4	1.3
Total	300	100.0
Ethnicity		
Yoruba	222	74.0
Igbo	22	7.3
Hausa	33	11.0
Others	23	7.7
Total	300	100.0
Occupation		
Artisan	45	15.0
Trader	84	28.0
Farmer	22	7.3
Apprentice	138	46.0
Others	11	3.7
Total	300	100.0
Education of Father		
Non-formal	189	63.0
Primary	93	31.0
Secondary	11	3.7
Tertiary	7	2.3
Total	300	100.0
Education of Mother		
Non-formal	116	38.7
Primary	122	40.7
Secondary	45	15.0
Tertiary	17	5.7
Total	300	100.0

Almost half of the respondents, 49.3%, are smokers; hence, the prevalence of cigarette smoking is 49.3%. Half of the smokers, 76 (50.8%), are within the age group 16-20 years, and about seventy per cent (70.3%) of the smokers have been smoking for 5 years. Almost half of the smokers, 73 (49.3%), smoke every week, while close to half of the smokers, 61 (41.2%), smoke daily, and 9.5% of the smokers smoke occasionally (Table 2).

Table 2 - Prevalence and pattern of tobacco among respondents

Prevalence and pattern	Frequency	%
Do you Smoke		
Yes	148	49.3
No	152	50.7
Total	300	100.0
Age respondents start smoking		
10-15	41	27.7
16-20	76	50.8
21-25	31	20.9
Total	148	100.0
How many years have you been smoking?		
2years	16	10.8
5years	104	70.3
10 years	28	18.9
Total	148	100.0
How often do you smoke?		
Daily	61	41.2
Weekly	73	49.3
Occasionally	14	9.5
Total	148	100.0

The majority of the smokers (140, or 94.6%) had smoked cigarettes in the past 30 days, and more than half of the smokers, approximately fifty-eight per cent (57.9%), smoked cigarettes every day during the past 30 days. Also, about one-third of the smokers (45), constituting 32.1%, usually smoked one pack of cigarette sticks in the last month and the majority of the smokers (133, or 95.0%) smoke cigarettes in the presence of nonsmokers (Table 3).

Table 3 - Smoking of cigarettes in the past 30 days

Variable	Frequency	%
Have you smoked a cigarette in the past 30 days?		
Yes	140	94.6
No	8	5.4
Total	148	100.0

Variable	Frequency	%
Number of days smoke cigarettes in the last 1 month		
1 time	1	0.7
2 times	34	24.3
3 times	4	2.9
4 time	11	7.9
5 times	9	6.4
Variable	Frequency	Percent (%)
Every day	81	57.9
Total	140	100.0
The number of sticks of cigarettes usually smoke		
½ pack	24	17.1
One pack	45	32.1
Two packs	26	18.6
Three packs	37	26.4
> packs	8	5.7
Total	140	100.0
Smoke cigarettes in the presence of nonsmokers		
Yes	133	95.0
No	7	5.0
Total	140	100.0

Almost half of the smokers 45.0% have tried to stop smoking, and more than one-third of the smokers (39.7%) have been attempting to stop smoking three times, while twenty-eight per cent (28.6%) of the smokers have tried to stop smoking so many times (Table 4).

More than two-thirds of the respondents (68.0%) and nearly three-quarters of the respondents (72.7%) were aware that smoking

cigarettes could cause lung diseases and heart disease, respectively. More than half of the respondents (177, or 59.0%) were aware that smoking cigarettes could result in sudden death, and the majority of respondents (89.0%) recognised that it could cause peptic ulcer illnesses.

Table 4 – Ever tried to stop smoking

Variable	Frequency	%
Have you ever tried to stop smoking?		
Yes	63	45.0
No	77	55.0
Total	140	100.0
If yes, what number of times have you ever tried to stop smoking?		
Ones	12	19.0
Twice	8	12.7
Thrice	25	39.7
So many times	18	28.6
Total	63	100.0

Furthermore, 55.7% of the respondents are aware that lung damage might result from breathing in smoke from another person's cigarette. Pregnant women who smoke are more likely to lose their pregnancy, according to more than half of respondents (58.0%), and 53.0% of respondents agreed that pregnant women who smoke may give birth to babies with abnormal arms and legs. Three-quarters of the respondents (71.7%) knew that smoking cigarettes could cause weight loss, and the majority of the respondents (95.3%) confirmed that it could cause darkening of the lips (Table 5).

Table 5 – Knowledge of respondents related to health risks

Knowledge	Yes	(%)	No	(%)	I Don't Know	(%)
Is cigarette smoking related to lung disease	218	72.7	44	14.7	38	12.7
Is cigarette smoking related to heart disease	204	68.0	55	18.3	41	13.7
Is cigarette smoking related to peptic ulcer disease?	267	89.0	22	7.3	11	3.7
Is cigarette smoking related to Sudden death	177	59.0	67	22.3	56	18.7
Is inhaling smoke from another person's cigarette related to lung disease	167	55.7	78	26.0	55	18.3
Can cigarette smoking by pregnant women predispose that woman to losing her pregnancy	174	58.0	59	19.7	67	22.3
Can cigarette smoking by pregnant women predispose that woman birth to a baby that is born with abnormal arms and legs	159	53.0	67	22.3	74	24.7
Can cigarette smoking cause weight loss	215	71.7	72	24.0	13	4.3
Can cigarette smoking cause darkening of lips	286	95.3	11	3.7	3	1.0

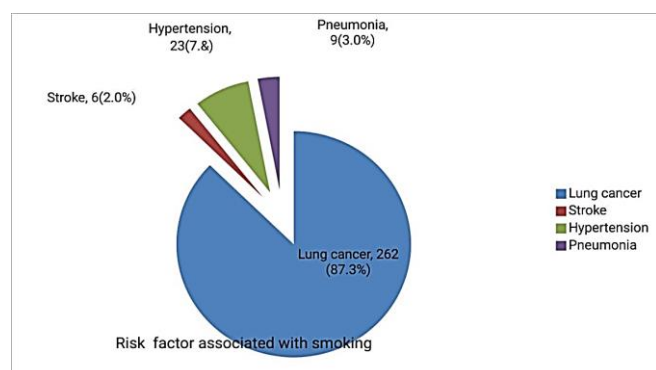


Figure 1 – Respondents' knowledge of risk factors associated with smoking

More than half of the respondents (87.3%) knew that the common risk factor associated with smoking is lung cancer, and 7.0% of the respondents agreed that hypertension is another risk factor associated with smoking. In comparison, less than 5.0% of the respondents have the perception that pneumonia and stroke are risk factors associated with smoking.

Nearly three-quarters of the respondents, 220 (73.3%), had a good knowledge of cigarette smoking, with a mean knowledge score of 6.52 ± 0.96 . However, a quarter of the respondents, 80 (26.7%), also had a poor knowledge related to cigarette smoking of 3.16 ± 1.54 (Table 6).

Table 6 – Scoring and grading of responses on knowledge related to cigarette smoking

Scoring and grading	Frequency	%	Mean $\pm$ SD
Poor (0-45%)	80	26.7	3.16 $\pm$ 1.54
Good (46-100%)	220	73.3	6.52 $\pm$ 0.96
Total	300	100.0	

Almost three-quarters of the respondents, approximately 72.0%, enjoy smoking, and more than two-thirds of the respondents (63.0%) don't think cigarettes should be sold to young people of age less than 18 years old. However, 70.3% of the respondents (70.3%) don't think people should allow smoking in open places. More than two-thirds of the respondents (195, or 65.0%) thought smoking cigarettes makes them look more attractive in society, while more than three-quarters of the respondents (234, or

78.0%) won't leave if they go to places where people are smoking cigarettes.

Notably, more than two-thirds of the respondents (190, or 63.3%) don't intend to smoke a cigarette in the future, and the majority of the respondents (267, or 89.0%) do not think cigarette advertisements should be banned in society (Table 7).

Table 7 – Attitude of youths towards smoking

Attitude	Frequency	%
Do you enjoy smoking?		
Yes	216	72.0
No	76	25.3
I don't know	8	2.7
Total	300	100.0
I think cigarettes should be sold to young people less than 18 years old.		
Yes	111	37.0
No	189	63.0
I don't know	0	0.0
Total	300	100.0
I think people should be allowed to smoke in public places.		
Yes	78	26.0
No	211	70.3
I don't know	11	3.7
Total	300	100.0
Think smoking makes one look more attractive.		
Yes	66	22.0
No	195	65.0
I don't know	39	13.0
Total	300	100.0
If you go to a place where people are smoking cigarettes, will you leave the place?		
Yes	55	18.3
No	234	78.0
I don't know	11	3.7
Total	300	100.0
Do you intend to smoke cigarettes in the future?		
Yes	88	29.3
No	190	63.3
I don't know	22	7.3
Total	300	100.0
Do you think cigarette advertisements should be banned?		
Yes	33	11.0
No	267	89.0
I don't know	0	0.0
Total	300	100.0

More than two-thirds of the respondents (70.0%) have a positive attitude towards cigarette smoking, with a mean score of 8.83 ± 0.92 ; this is statistically significant (Table 8).

Table 8 – Scoring and grading of respondent's Cigarette Smoking Attitude

Scoring and grading	Frequency	%	Mean $\pm$ SD
Negative attitude (0%-50%)	90	30.0	2.07 $\pm$ 1.69
Positive attitude (51-100%)	210	70.0	8.83 $\pm$ 0.92
Total	300	100.0	

The majority of the respondents' relations/parents (81.7%) smoked, while more than one-tenth of respondents, 39 (13.0%) didn't smoke. Also, the majority of the respondent's religion (91.7%) doesn't allow smoking, and the majority of the respondents (256, or 85.3%) agreed that peer influence does contribute to youth smoking (Table 9).

Table 9 – Factors influencing smoking pattern among respondents

Risk factors	Frequency	%
Does any of your relation/parent smoke		
Yes	245	81.7%
No	39	13.0%
I don't know	16	5.3%
Total	300	100.0
Does your religion allow smoking?		
Yes	9	3.0
No	275	91.7
I don't know	16	5.3
Total	300	100.0
Does peer influence contribute to youth smoking		
Yes	256	85.3

Risk factors	Frequency	%
No	33	11.0
I don't know	11	3.7
Total	360	100.0

About two-thirds of the respondents (74, or 58.3%) fall in the age group 21-25 years were current smokers, while half of the respondents (34, or 50.0%) fall within the age 15-20 years were nonsmokers. This observed difference in the pattern of smoking based on age group is statistically significant ($p < 0.05$) (Table 10).

More than two-thirds of the male respondents (144, or 62.1%) were current smokers compared to one-tenth of the female respondents 7 (5.9%) who were current smokers. This observed difference in smoking patterns based on gender is statistically significant ($p < 0.05$). More than three-quarters of the current smokers (78.3%) were divorced, compared to almost half of the nonsmokers (46.7%) who are single. This observed difference in smoking patterns based on marital status is statistically significant ($p < 0.05$). 83 (50.6%) and 2 (50%) of the respondents who had primary and tertiary education, respectively, were current smokers, compared to 68 (41.5%) and 25 (40.3%) of the respondents who had primary and secondary education, respectively were nonsmokers.

About half of the current smokers (83, or 50.6%) had primary and 2 (50.0%) tertiary education, respectively, compared to almost half of nonsmokers (68, or 41.5%) and 25 (40.3%) who had primary and secondary education respectively. This observed difference in smoking patterns based on the educational status of the respondents is statistically significant ($p < 0.05$). Three-quarters of the current smokers (25, or 75.8%) are of the Hausa ethnic group compared to close to half of the nonsmokers (94, or 42.3%) who are Yorubas.

Table 10 – Association between sociodemographic characteristics and pattern of cigarette smoking

Demographic Data	The pattern of cigarette smoking								Significant Level
	Former smoker		Current Smoker		Nonsmoker		Total (100.0)		
	N	%	N	%	N	%	N/%		
	36	12.0	148	49.3	116	38.7	300/100.0		
Age									

Demographic Data	The pattern of cigarette smoking							
	Former smoker		Current Smoker		Nonsmoker		Total (100.0)	Significant Level
	N	%	N	%	N	%	N/%	
	36	12.0	148	49.3	116	38.7	300/100.0	
15-20	8	11.8	26	38.2	34	50.0	68/100.0	X=16.284
21-25	7	5.5	74	58.3	46	36.2	127/100.0	df=6
26-30	15	19.0	36	45.6	28	35.4	79/100.0	P= 0.0261
31-35	6	23.1	12	46.2	8	30.8	26/100.0	X2=9.929
Gender								
Male	29	12.5	144	62.1	59	25.4	232/100.0	df=2
Female	7	10.3	4	5.9		0.0	68/100.0	p=0.0070
Marital Status								
Single	24	13.3	72	40.0	84	46.7	180/100.0	X2=26.098
Married	4	9.1	22	50.0	18	40.9	44/100.0	df=8
Separated	2	5.6	27	75.0	7	19.	36/100.0	p=0.0236
Demographic Data	The pattern of cigarette smoking							
Widowed	6	35.3	9	52.9	2	11.8	17/100.0	
Divorced	0	0.0	18	78.3	5	21.7	23/100.0	
Religion								
Christianity	11	13.3	43	51.8	29	34.9	83/100.0	X2=33.314
Islam	24	11.6	98	47.3	85	41.1	207/100.0	df=4
Traditional	1	10.0	7	70.0	2	20.0	10/100.0	p=0.0061
Education								
Non-formal	5	7.1	43	61.4	22	31.4	70/100.0	X2=28.677
Primary	13	7.9	83	50.6	68	41.5	164/100.0	df=6
Secondary	17	27.4	20	32.3	25	40.3	62/100.0	p=0.0053
Tertiary	1	25.0	2	50.0	1	25.0	4/100.0	
Ethnicity								
Yoruba	23	10.4	105	47.3	94	42.3	222/100.0	
Igbo	5	22.7	8	36.4	9	40.9	22/100.0	X2=32.501
Hausa	0	0.0	25	75.8	8	24.2	33/100.0	df=6
Others	8	34.8	10	43.5	5	21.7	23/100.0	p=0.0004
Occupation								
Artisan	6	13.3	23	51.1	16	35.6	45/100.0	
Trader	12	14.3	28	33.3	44	52.4	84/100.0	X2=25.126
Farmer	3	13.6	13	59.1	6	27.3	22/100.0	df=8
Apprentice	14	10.1	79	57.2	45	32.6	138/100.0	p=0.0021
Others	1	9.1	5	45.5	5	45.5	11/100.0	
Education of father								
Non-formal	7	3.7	99	52.4	83	43.9	189/100.0	X2=11.3433
Primary	21	22.6	45	48.4	27	29.0	93/100.0	df=6
Secondary	4	36.4	3	27.3	4	36.4	11/100.0	p=0.0362
Tertiary	4	57.1	1	14.3	2	28.6	7/100.0	
Education of Mother								
Non-formal	13	11.2	65	56.0	38	32.8	116/100.0	
Primary	10	8.2	57	46.7	55	45.1	122/100.0	X2=19.685
Secondary	6	13.3	21	46.7	18	40.0	45/100.0	df=6
Tertiary	7	41.2	5	29.4	5	29.4	17/100.0	p=0.0006

Thus, the observed difference in smoking patterns based on ethnicity is statistically significant ($p < 0.05$). Close to two-thirds of the current smokers (59.1%) are farmers, while more than half of the nonsmokers (52.4%) are traders by occupation. The observed difference in smoking patterns based on occupation is statistically significant ($p < 0.05$). More than half of the former smokers' fathers (57.1%) had tertiary education compared to about half of the nonsmokers' fathers, 83 (43.9%), who had non-formal education. Thus, there is a statistical difference in the smoking pattern at $p < 0.05$ based on the father's education. More so, almost two-thirds of the current smoker's mothers (56.0%) had non-formal education compared to close to half of the nonsmokers' mothers (45.1%) who had primary education; this gives an observable statistical difference ($p < 0.05$) in smoking pattern about the mother's education.

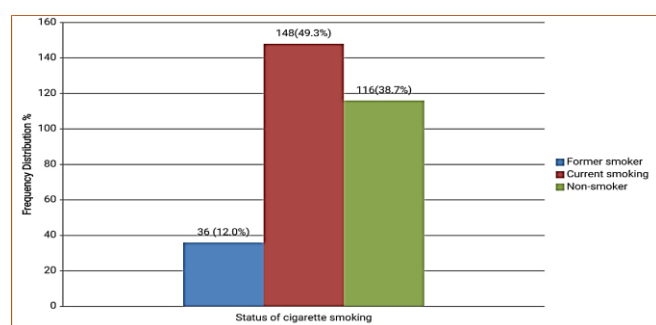


Figure 2 – Bar chart showing respondents' status of cigarette smoking

Current smokers have the highest peak in the plot with a total percentage of 49.3%, followed by nonsmokers with 38.7%, while former smokers have the lowest rate of 12.0%.

More than one-third of the respondents (32.1%) smoked one pack of cigarette sticks, while more than one-quarter of the respondents (26.4%) smoked 3 packs of cigarette sticks, then 18.6%, 17.1%, 5.7% of the respondents smoked two packs, ½ pack and four packs of cigarette sticks respectively within a month. The number of respondents, together with the packs of cigarette sticks recorded within a month in this present study, seems adequately higher than what was previously indicated by author Adesola [14] to determine the prevalence of smoking among adolescents at Ibadan, though, over a quarter of adolescents in Ibadan, reported to smoked 8 - 12 cigarette sticks per day.

This finding points out that about half of the respondents (50.7%) have ever smoked, while close to half of the respondents (49.3%) are current smokers. Additionally, this research showed that 50.8% of the respondents began smoking between the ages of 16 and 20. Similar findings were reported in the 2010 National Drug Strategy Household Survey, which revealed that nearly a quarter of the population is an ex-smoker and that the number of people aged 14 or older who smoke has decreased from 49% in 1991 to 57.8% in 2010. As well, fewer people than in previous years smoke [15].

More so, almost half of the respondents (148 or 49.3%) are current smokers, while more than one-third of the respondents (116 or 38.7%) are nonsmokers, with a higher proportion of current smokers being males (144, or 62.1%). The report in this study is higher compared to what was obtained in a survey conducted in Oshogbo (Southwest Nigeria), which reported that just 22% of the respondents had ever smoked, compared to 8.7% who were current smokers and 13.2% of current smokers who were men [16].

About two-thirds of the respondents (58.3%) aged around group 21-25 years were current smokers, while half of the respondents (50.0%) between age 15-20 years old were nonsmokers with a mean age of smoking initiation of 23.6 ± 4.7 . This research is comparable to one done in Oshogbo, southwest Nigeria, where 85% of smokers today began their habit after turning eighteen [17]. However, it differs from a study conducted in China among secondary school students in Zhejiang province, where only 0.3% of respondents were current smokers, and 25.7% of respondents – men and 5.4% of women – had ever smoked. Of those who had ever smoked, 41.9% had smoked before turning ten, and 7.9% had smoked before turning five [17].

Furthermore, more than two-thirds of the respondents (65.0%) think smoking makes one look more attractive in society, while more than one-fifth of the respondents (22.0%) don't think tobacco makes one look more attractive. This report is similar to the study conducted in a cross-sectional survey conducted in 2013 by Labib, Abeer, and Ahmed to investigate smoking knowledge, attitudes, and practices between smokers and nonsmokers; it was found that a significant portion of students had negative attitudes toward the presumption that smoking women would be more attractive (90.6%), have

stronger personalities (93.4%), and have more friends (89.6%) than non-smoking women [18]. Here, more than two-thirds of the respondents (63.3%) don't intend to smoke cigarettes in the future, while close to one-third (29.3%) intend to smoke cigarettes in the future; this is compared to the study conducted at Ilorin College of Education where current smokers in this study expressed diverse opinion on quitting. About 2/3 of current smokers had no intention to continue cigarette smoking (64.7%), while (35.3%) of them intended to continue cigarette smoking [19]. Similarly, according to a study by authors [20], roughly 72% of the respondents had attempted to stop smoking in the past, 80.4% thought it would be difficult or impossible to stop, and 91.5% felt they needed assistance. Most respondents (267, or 89.0%) stated that cigarette advertisements should not be banned. Meanwhile, over one-tenth of respondents (33, or 11.0%) supported banning cigarette advertisements. Similarly, a study conducted by authors [21] revealed that 94% of the 215 participants were aware that smoking could lead to severe illnesses, and 88% supported prohibiting smoking in public places.

Consequently, close to three-quarters of the respondents (218, or 72.7%) recognised that smoking cigarettes may cause lung conditions, and over two-thirds of the participants were aware that smoking cigarettes could cause heart problems. Compared to the study, more teenagers now believe that smoking is likely to cause health issues like lung cancer or a heart attack, while fewer young people plan to smoke or be-

lieve that smoking makes them appear mature [3].

CONCLUSIONS

This study revealed a prevalence rate of 49.3% for smoking among youth, the majority of whom had good knowledge and attitudes related to cigarette smoking. It is therefore stated that factors related to smoking include parental smoking, religious practice and peer influence. Also, it is revealed in this study that there is a significant solid association existing between sociodemographic characteristics and the pattern of smoking among the respondents ($p < 0.05$).

Recommendations

To create awareness of the prevalence of smoking within society. The parents and the government have a lot to do. The parent should ensure that the children under their care are appropriately monitored and guided by peer influence. Also, the parent should not leave their children too often with neighbours. Instead, they should enrol them in a school lesson to prevent them from roaming about the street and after school, they should pick up their children immediately.

Then, the government should set a rule and implement the policy to arrest any vendor selling cigarettes to individuals less than 18 years of age. The government can also ensure that the vendors are given little supply of cigarettes at the time, causing inflation in the cost of cigarettes; this will cause buyers to reduce their daily consumption.

REFERENCES

1. Akinpelu, A. O. (2015). *The Menace Of Tobacco Smoking Among Nigerian Adolescents*. *Developing Country Studies*, 5(15).
2. Pierce, J. P., White, V. M., & Emery, S. L. (2012). What public health strategies are needed to reduce smoking initiation? *Tobacco Control*, 21(2), 258–264. doi: [10.1136/tobaccocontrol-2011-050359](https://doi.org/10.1136/tobaccocontrol-2011-050359)
3. Warren, C., Yach, D., Da Costa E Silva, V. L., Riley, L., Prevention, M., Henson, R., Asma, S., Blanton, C., Caraballo, R., Horton, R., Kahn, D., Lea, V., Lee, J., Lord, L., Staras, S., Tablidilo, M., Zinner, L., Chauvin, J., Nue, L., Marcus, S. (2002). Tobacco use among youth: a cross country comparison. *Tobacco Control*, 11(3), 252–270. doi: [10.1136/tc.11.3.252](https://doi.org/10.1136/tc.11.3.252)
4. Owonaro, P. A., & Eniojukan, J. F. (2015). Cigarette Smoking Practices, Perceptions and Awareness of Government Policies among Pharmacy Students in Niger Delta University in South-South Nigeria. *Pharmaceutical and Biosciences Journal*, 20–29. doi: [10.20510/ukjpb/3/i5/89484](https://doi.org/10.20510/ukjpb/3/i5/89484)
5. Ayankogbe, O.O., Inem, V.A., Bamigbala, O.A., & Roberts, O.A. (2003) Attitudes and Determinants of Cigarette Smoking among Rural Dwellers in Southwest Nigeria. *Nigerian Medical Practitioner*, 44, 70-74.

6. Salaudeen, A., Musa, O., Akande, T., & Bolarinwa, O. (2013). [Effects of health education on cigarette smoking habits of young adults in tertiary institutions in a northern Nigerian state.](#) *Health Science Journal*, 7(1), 54-67.
7. Odukoya, O. O., Odeyemi, K. A., Oyeyemi, A. S., & Upadhyay, R. P. (2013). Determinants of Smoking Initiation and Susceptibility to Future Smoking among School-Going Adolescents in Lagos State, Nigeria. *Asian Pacific Journal of Cancer Prevention*, 14(3), 1747–1753. doi: [10.7314/apjcp.2013.14.3.1747](#)
8. Desalu, O., Olokoba, A., Danburam, A., Salawu, F., & Issa, B. (2007). [Epidemiology Of Tobacco Smoking Among Adults Population In North-East Nigeria.](#) *The Internet Journal of Epidemiology*, 6(1).
9. Raji, M. O., Abubakar, I. S., Oche, M. O., & Kaoje, A. U. (2013). Prevalence and determinants of cigarette smoking among in-school adolescents in Sokoto metropolis, Northwest Nigeria. *International Journal of Tropical Medicine*, 8(3), 81–86.
10. Idris, S., & Sambo, M. (2010). Psycho-active substance use among in-school adolescents in Zaria, Northwestern Nigeria: What are the triggers? *Nigerian Journal of Medicine*, 18(3). doi: [10.4314/njm.v18i3.51191](#)
11. Bhojani, U. M., Elias, M. A., & N, D. (2011). Adolescents' perceptions about smokers in Karnataka, India. *BMC Public Health*, 11(1). doi: [10.1186/1471-2458-11-563](#)
12. Halpern-Felsher, B. L., Biehl, M., Kropp, R. Y., & Rubinstein, M. L. (2004). Perceived risks and benefits of smoking: differences among adolescents with different smoking experiences and intentions. *Preventive Medicine*, 39(3), 559–567. doi: [10.1016/j.ypmed.2004.02.017](#)
13. Desalu, O. (2011). Prevalence of Chronic Bronchitis and Tobacco Smoking in Some Rural Communities in Ekiti State, Nigeria. *Nigerian Postgraduate Medical Journal*, 18(2), 91. doi: [10.4103/1117-1936.170328](#)
14. Olumide, A. O., Shmueli, A., Adebayo, E. S., & Omotade, O. O. (2021). Economic costs of cigarette smoking among adolescents in Nigeria. *Journal of Public Health*, 30(7), 1701–1712. doi: [10.1007/s10389-021-01644-5](#)
15. Australia's Health (2010). Australia institute of health and welfare. Retrieved from <https://www.aihw.gov.au/reports/australias-health/australias-health-2010/summary>
16. Adepoju, E. G., Olowookere, S. A., Adeleke, N. A., Afolabi, O. T., Olajide, F. O., & Aluko, O. O. (2013b). A population-based study on the prevalence of cigarette smoking and smokers' characteristics at Osogbo, Nigeria. *Tobacco Use Insights*, 6, TUI.S10763. doi: [10.4137/tui.s10763](#)
17. Hesketh, T., Ding, Q. J., & Tomkins, A. (2001). Smoking among youths in China. *American Journal of Public Health*, 91(10), 1653–1655. doi: [10.2105/ajph.91.10.1653](#)
18. Sharif, L., Q, A., Il, & Alkafajei, A. (2013). Knowledge, attitude and practice of university students towards smoking in Irbid, Jordan. *Journal of Public Health and Epidemiology*, 5(1), 29–36. doi: [10.5897/jphe12.070](#)
19. Oboma, Y. I., Nguepi, J., Priscile, & Enaregha, E. B. (2013). [Cigarette smoking among handicapped and non-handicapped youths in Yenagoa metropolis, Bayelsa state Nigeria.](#) *Sky Journal of Medicine and Medical Sciences*, 1(6), pp. 25–28.
20. Odeyemi, K. A., Osibogun, A., Akinsete, A. O., & Sadiq, L. (2009). The Prevalence and Predictors of Cigarette Smoking among Secondary School Students in Nigeria. *Nigerian Postgraduate Medical Journal*, 16(1), 40. doi: [10.4103/1117-1936.181280](#)
21. Krosnick, J. A., Chang, L., Sherman, S. J., Chassin, L., & Presson, C. (2005). [The Effects of Beliefs About the Health Consequences of Cigarette Smoking on Smoking Onset.](#) *Journal of Communication*, 56(1).