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Who are the Smokers and what Factors Influence Smoking among Amassoma Community in South-South Nigeria?

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ABSTRACT : *Smoking is prevalent among Nigerians. This study identified the smokers and related factors among Amassoma Community in South-South Nigeria. Questionnaires were administered randomly within the community to 260 consenting respondents; Data was analyzed with SPSS version 20. Respondents were Males (73.6%), aged 18-45 years (77.5%), single (45.7%), married (37.8%); with secondary/tertiary education (68.1%); Civil Servants (13.4%)); Students (26%); Drivers (12.2%); Christian (72.4%) and Ijaw tribe (54.7%).64.6%.had ever smoked at prevalent initiation age of 16-25 years (74.5%); current smokers were 86.0%; 97.2% also took alcohol; 43.3% always smoked for relaxation; 48.9% always smoked to have fun with their friends; 58.20% sometimes smoked in order to fit into the social circle; Gender, Age group and Education were associated with past ($p<0.05$) but not with present ($p>0.05$) smoking history; marital status and average annual income had no correlation with both past and present history of smoking ($p>0.05$). Smoking cessation outreaches should target the identified vulnerable groups in order to substantially lower the smoking prevalence in this community.*

I. INTRODUCTION

Health care professionals have lamented the effect of smoking on human and this has not lost its negative global gravity [1]. Smoking has led to increase in antisocial behaviour among the young ones [2] .The youths are the hope of any nation. To sustain this, the health of the youths is essential in nation growth. Youth's indulgence in cigarette smoking is on the increase. This has shortened their life expectancy. Cigarette smoking is implicated in morbidity and mortality [1]. Hence there is need for urgent intervention to forestall its detrimental effects on the populace [2]**.**

Tobacco smoking has led to several health challenges to smokers. This has become a public Health challenge globally. Cigarette smoking became famous in the 20th century. In 1950 smoking was more common with the men and of recent, the women rate of smoking is almost the same with the men, mostly in the developed countries [3].

Age group of 13 -18 are most affected with the habit of smoking and become addicted for the rest of their life, which is associated with injurious effects on them [4]

This has wasted a lot of money among the teenagers. A case study is in the United State with an annual cost of smoking as $5816 [5]. Some reasons that influence smoking despite the effects are friends, community members, academic performance, media environment, enjoyable period of life spans [4]

This study was aimed at evaluating who are smoking, what informed and sustained the habit of smoking among the inhabitants of Amassoma Community in Bayelsa State, Nigeria.

II. METHODS

1.1. Study population

This study was carried out in Amassoma community which is a community in Southern ljaw Local Government of Bayelsa state, South- South region of Nigeria. The community has a population of about 20,000.

1.2. Study Design and Sample

260 questionnaires were administered randomly to respondents that consented after carefully explaining the objectives of the study. The sample size was calculated using the formula for evaluating the sample size population [6]. The questionnaire was designed to capture demographic data, smoking prevalence, and factors that influenced smoking.

1.3. Data Analysis

Information from the question was entered and analyzed using SPSS version 20 spread sheet for descriptive and inferential statistic. A t-test was also conducted using one way ANOVA.

III. RESULTS

The response rate was 97.7%

a. Demographic Data

Male and female that participated in the study was 73.6% and 26.4% respectively. Respondents were mostly in the age of 18 and 30 years and their educational qualifications were more of secondary and tertiary education (30.7% and 37.4% respectively); 45.7% of respondents were single, 72.4% were Christians; 54.7% were native Ijaws; 26% were students; 13.4% were civil servants; 12.2% were drivers. TABLES 1a and 1b

Table : 1a: Demographic characteristics of Respondents

Variable		Frequency	%
Gender	Male	187	73.6
	Female	67	26.4
Age group (years)	18-30	109	42.9
31-45		88	34.6
46-60		48	18.9
Above 60		9	3.5
Marital status	Single	116	45.7
Married		96	37.8
Widowed		13	5.1
Divorced		14	5.5
Separated		15	5.9
Education	Primary	39	15.4
Secondary		78	30.7
Tertiary		95	37.4
None		42	16.5
Occupation	Civil servant	34	13.4
Farmer		24	9.4
Retired		8	3.1
Military		12	4.7
Artisan		3	1.2
Driver		31	12.2
Business		28	11.0
Contractor		9	3.5
School teacher		8	3.1
Student		66	26.0
Lecturer		8	3.1
Banker		7	2.8
Unemployed		10	3.9
Others		6	2.4

Table 1 b: Demographic characteristics of Respondents

Variable	Frequency	%
Av annual income (Naira)		
50-100k	136	53.5
101-500k	78	30.7
501k-1m	26	10.2
1-2m	5	2.0
Above 2m	9	3.5
Place of residence		
Urban area	90	35.4
Rural area	127	50.0
Semi urban area	37	14.6
Religion		

Christianity	184	72.4
Islam	20	7.9
Traditional	32	12.6
Others	18	7.1
Tribe/Ethnic group		
Ijaw	139	54.7
Igbo	32	12.6
Yoruba	18	7.1
Urhobo	13	5.1
Isoko	7	2.8
Hausa	9	3.5
Itsekiri	12	4.7
Ogbia	14	5.5
Nembe	10	3.9

b. Smoking Prevalence, Initiation Age and Combined Alcohol Consumption

64.6%.was recorded as the smoking prevalence in the community. The most prevalent age of initiation was 16-25 years (74.5%); respondents that also took alcohol were 97.2% initiated mostly within the age limit of 16-25 (60.6%). Current smokers and drinkers were 86% and 97.1% respectively. TABLE 2.

Table 2: Smoking Prevalence

Variable	Frequency	Percentage
Have you ever smoke cigarette? (n=254)		
Yes	164	64.6
No	90	35.4
If yes, at what age did you start smoking? (n=164)		
10-15yrs	41	25.0
16-25yrs	93	56.7
26-35yrs	28	17.1
36-50yrs	2	1.2
Do you still smoke? (n=164)		
Yes	141	86.0
No	23	14.0
Have you ever drunk alcohol? (n=141)		
Yes	137	97.2
No	4	2.8
If yes, at what age did you start drinking? (n=137)		
10-15yrs	43	31.4
16-25yrs	83	60.6
26-35yrs	10	7.3
36-50yrs	1	.7
Do you still drink? (n=137)		
Yes	133	97.1
No	4	2.9

c. Reasons for Smoking

Regarding reasons for smoking, 31.7% always smoked so as to cool off; over 50.0% sometimes smoked in order relieve stress whereas, 43.3% always smoked to feel relaxed. For increase of sexual performance, 15.0% of respondents always smoked to enhance their performance and 37.9% sometimes smoked to enhance their performance. 16.4% always and 45% sometimes smoked to increase work output. 48.9% always smoked to enjoy with friends. Staying awake, 55.7% of respondents did smoke sometimes to stay awake; 58.20% sometimes smoked to be sociable, likewise in 46% of respondents, alcohol influenced their reasons for smoking. TABLE 3

Table3: Reasons for smoking

Variable	Reasons f or smoking			N
	Always	Sometimes	Never	
To relieve stress	58	70	12	140
	41.4%	50.0%	8.6%	
To feel relaxed	61	75	5	141
	43.3%	53.2%	3.5%	
To increase sexual performance	21	53	66	140
	15.0%	37.9%	47.1%	
To increase work output	23	63	54	140
	16.4%	45.0%	38.6%	
To stay awake/alert	24	78	38	140
	17.1%	55.7%	27.1%	
To enjoy with my friends	69	69	3	141
	48.9%	48.9%	2.1%	
In order to be sociable	17	82	42	141
	12.10%	58.20%	29.80%	
Influenced by alcohol drinking	22	64	53	139
	15.8%	46.0%	38.1%	
To cool off	44	80	15	139
	31.7%	57.6%	10.8%	

d. Cross-tabulations

Gender, Age group and Education were associated with past ($p<0.05$) but not with present ($p>0.05$) smoking history. Place of residence and Occupation were associated with both past and present history of smoking ($P<0.05$).

Marital status and Average annual income had no correlation with both past and present history of smoking ($p>0.05$). TABLE 4a and 4b

Table 4a: Cross-tabulation of history of cigarette smoking and demographic data (n=254)

Variable	Have you ever smoke cigarette?		Total	p-value	Do you still smoke		Total	p-value
	Yes	No			Yes	No		
Gender								
Male	141	46	187		121	20	141	
	55.5%	18.1%	73.6%		73.8%	12.2%	86.0%	
Female	23	44	67	0.000*	20	3	23	0.888
	9.1%	17.3%	26.4%		12.2%	1.8%	14.0%	
Marital status								
Single	74	42	116		62	12	74	
	29.1%	16.5%	45.7%		37.8%	7.3%	45.1%	
Married	60	36	96		53	7	60	
	23.6%	14.2%	37.8%		32.3%	4.3%	36.6%	
Widowed	8	5	13	0.742	7	1	8	0.408
	3.1%	2.0%	5.1%		4.3%	.6%	4.9%	
Divorced	11	3	14		11	0	11	
	4.3%	1.2%	5.5%		6.7%	0.0%	6.7%	
Separated	11	4	15		8	3	11	
	4.3%	1.6%	5.9%		4.9%	1.8%	6.7%	

Age group (years)								
18-30	60	49	109		47	13	60	
	23.6%	19.3%	42.9%		28.7%	7.9%	36.6%	
31-45	59	29	88	0.021*	52	7	59	0.141
	23.2%	11.4%	34.6%		31.7%	4.3%	36.0%	
46-60	38	10	48		35	3	38	
	15.0%	3.9%	18.9%		21.3%	1.8%	23.2%	
Above 60	7	2	9		7	0	7	
	2.8%	.8%	3.5%		4.3%	0.0%	4.3%	
Education								
Primary	32	7	39		29	3	32	
	12.6%	2.8%	15.4%		17.7%	1.8%	19.5%	
Secondary	56	22	78	0.005*	51	5	56	0.137
	22.0%	8.7%	30.7%		31.1%	3.0%	34.1%	
Tertiary	50	45	95		42	8	50	
	19.7%	17.7%	37.4%		25.6%	4.9%	30.5%	
None	26	16	42		19	7	26	
	10.2%	6.3%	16.5%		11.6%	4.3%	15.9%	
Place of residence								
Urban area	52	38	90		36	16	52	
20.5%		15.0%	35.4%		22.0%	9.8%	31.7%	
Rural area	92	35	127	0.030*	88	4	92	0.000*
36.2%		13.8%	50.0%		53.7%	2.4%	56.1%	
Semi urban	20	17	37		17	3	20	
area	7.9%	6.7%	14.6%		10.4%	1.8%	12.2%	

Table 4b**:** Cross-tabulation of history of cigarette smoking and demographic data n=254

Variable	Have you ever smoke cigarette?		Total	p-value	Do you still smoke		Total	p-value
	Yes	No			Yes	No		
Occupation								
Civil servant	18	16	34		15	3	18	
	7.1%	6.3%	13.4%		9.1%	1.8%	11.0%	
Farmer	17	7	24		15	2	17	
	6.7%	2.8%	9.4%		9.1%	1.2%	10.4%	
Retired	6	2	8		6	0	6	
	2.4%	.8%	3.1%		3.7%	0.0%	3.7%	
Military	9	3	12		7	2	9	
	3.5%	1.2%	4.7%		4.3%	1.2%	5.5%	
Artisan	3	0	3		1	2	3	
	1.2%	0.0%	1.2%		.6%	1.2%	1.8%	
Driver	30	1	31		28	2	30	
	11.8%	.4%	12.2%		17.1%	1.2%	18.3%	
Business	19	9	28	0.002*	15	4	19	
	7.5%	3.5%	11.0%		9.1%	2.4%	11.6%	
Contractor	5	4	9		4	1	5	0.006*
	2.0%	1.6%	3.5%		2.4%	.6%	3.0%	
School teacher	3	5	8		1	2	3	
	1.2%	2.0%	3.1%		.6%	1.2%	1.8%	
Student	33	33	66		31	2	33	
	13.0%	13.0%	26.0%		18.9%	1.2%	20.1%	
Lecturer	4	4	8		3	1	4	
	1.6%	1.6%	3.1%		1.8%	.6%	2.4%	
Banker	5	2	7		5	0	5	
	2.0%	.8%	2.8%		3.0%	0.0%	3.0%	

Unemployed	9	1	10		9	0	9	
	3.5%	.4%	3.9%		5.5%	0.0%	5.5%	
Others	3	3	6		1	2	3	
	1.2%	1.2%	2.4%		.6%	1.2%	1.8%	
Average annual income (Naira)								
50-100k	83	53	136		70	13	83	
	32.7%	20.9%	53.5%		42.7%	7.9%	50.6%	
101-500k	55	23	78	0.153	48	7	55	
	21.7%	9.1%	30.7%		29.3%	4.3%	33.5%	
501k-1m	14	12	26		14	0	14	0.254
	5.5%	4.7%	10.2%		8.5%	0.0%	8.5%	
1-2m	5	0	5		3	2	5	
	2.0%	0.0%	2.0%		1.8%	1.2%	3.0%	
Above 2m	7	2	9		6	1	7	
	2.8%	.8%	3.5%		3.7%	.6%	4.3%	

IV. DISCUSSION

This study evaluated the smoking prevalence among Amassoma community. It also examined the reasons for and factors that influenced smoking.

a. Demography

There were more male respondents with a male: female ratio of 2.8:1; this is similar to other reports [7, 8].

The respondents were mostly within 16-25 age bracket in consonance with similar studies [8, 9].

The community is dominated mostly by Christians; this is associated with the result obtained in this study as 99% of respondents were Christians and were native Ijaw. The South-South region where this community is situated is entirely a Christian environment predominantly inhabited by the Ijaw tribe [10].

b. Prevalence and Motivating Factors

The prevalence of ever smoked was 64.6% which is very high. Most similar studies in Nigeria have reported the opposite with lower prevalence rates [9, 11, 12]. However, other studies have reported higher prevalence of smoking [8, 13].

Male to female prevalence of smoking put male rate of smoking higher than females. This is in line with other surveys that showed that the frequency of tobacco use differs significantly between the sexes [8]. A higher acceptability and use among males is suggested [14].

4.3. Initiation Age

About three-quarters of respondents represented a high proportion being initiated into the smoking habit at age 16-25 when most of them were in the secondary school. This is in line with other studies [9, 13, 15]**.** Lower debuting age has also been reported [8, 11, 16].

The debuting age is of serious concern as implicated in other studies, that the younger the age at which experimentation occurs, the more health risk to the users [17].

The rate of adolescents smoking in this study calls for greater concern and intervention, this age group being most vulnerable. Besides the adverse effect in adolescence, the use of tobacco in adolescence is also implicated in adulthood smoking [18]. This implies that the lower the adolescent smoking prevalence the lower the adulthood smoking prevalence is likely to be.

4.4. Intensity of Smoking

Most of the respondents that smoked took 1-5 sticks of cigarette per day which is in line with other similar studies [13]. Slightly higher consumption rates have been reported [11]. Studies have shown that in Nigeria, most smokers are light smokers [16]. From the foregoing, it is clear that whether passive smoker, heavy smoker or light smokers is inconsequential; smoking is detrimental to health no matter the degree or intensity of smoking [15].

4.5. Reason for Smoking

Several reasons were given by the respondents for smoking such as relieving stress, "to cool off", to feel relaxed, to increase sexual performance and to increase work output. These reasons given were in line with other studies [19].

However, sexual performance, increased work out put, and to cool off were not major reasons for smoking as far less than 50% gave them as reasons for smoking. Whereas, staying awake, enjoying with friends and being

social was implicated as major reasons for smoking. People smoke with different motives, some associate smoking with feeling less stressed and anxious. Other studies have linked it to temporary relieve of the unpleasant symptoms of nicotine withdrawal [20].

4.6. Smoking together with Alcohol Consumption

A large majority of respondents smoked whenever they drank alcohol and vice versa.

The use of tobacco and alcohol together has been examined in other surveys with a demonstration of strong correlation [21, 22].

The combined effect of smoking cigarette and taking alcohol is injurious to the consumers; on their own, they adversely affect various organs of the body; in combination, they will produce a synergistic effect, for instance, on cancer rates, and thereby add an extra dimension to the risk of negative health outcomes [21, 23].

The ugly trend of concurrent use of cigarette and alcohol consumption indicates a high mortality rate in future due to the complication of the aforementioned substances.

4.7. Smoking Influencers

In this population, smoking was correlated with Gender, Age, Education, Occupation and Place of residence. Various studies have indicated correlations between smoking habit and Gender, Age, and Education [16, 23].

Smoking was more prevalent with male gender. This association has been variously demonstrated by other researchers in this field [8, 24]. However, this study provided a distinction between gender association with past (correlated) and present (un-correlated) history of smoking. This means that in this population, there was no gender-mediated influence on current smoking habit.

Similarly, Age and Education were correlated only with past, but not with present smoking history in this population. Current smokers were not differentiated according to Age and Educational status, whereas there were more past smokers among 18-45 age group and the highly educated persons. Perhaps the more relevant information would be a non-correlation between these demographic data and current smoking status.

Place of residence and Occupation were positively linked with both past and present smoking history. There were more smokers among rural dwellers, students and drivers.

Past and present smoking habits bore no relationship with either marital status or average annual income.

These differentials have implications for policy development and appropriate strategy formulation to deal with the scourge.

V. CONCLUSION

The Amassoma community had more male, Christian and Ijaw residents. Residents were preponderantly Drivers, Students, Civil Servants and self-employed people. Smoking prevalence was high (64.6%) and most smokers also drank alcohol. The initiation age was predominantly in the adolescent age group (16-25 years). Most smokers were light smokers consuming 1-5 sticks of cigarettes per day. Multifarious reasons ranging from stress relief, cooling off and enhancing sexual performance were given for indulging in smoking. Demographic data was largely correlated with past and not with present smoking history with the exception of place of residence and occupation. Rural dwellers, Students and Drivers were the predominant smokers in this Community.

Smoking cessation programmes should target the identified vulnerable groups in order to substantially lower the smoking prevalence in this community.

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