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# **Research Article**

## Knowledge of Smoking Health Effects, Perception of Smoking Policies and Cessation Scenarios among Smokers in Amassoma Community in Nigeria Eniojukan Joshua F, Owonaro Peter A

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**Abstract:** Cigarette smoking has varieties of adverse effects on human health, both acute and chronic. Policies have been enunciated globally to attenuate the scourge of smoking and also to protect non-smokers from second-hand smoke. This study sought to evaluate the knowledge of smokers in Amassoma community of smoking adverse effects, their perceptions of smoking policies and cessation scenarios. 254 questionnaires were administered randomly to recipients that consented after carefully explaining the objective of the study. Data was analyzed with SPSS version 20. 94.3% of smokers were aware that smokers are liable to die young; 24.8% still smoked because they were addicted to it; 70.9% claimed they found it difficult to quit smoking; 46.8% of respondents had attempted quitting once. Reasons adduced for the failed quit attempts included extreme temptation (62.9%); 91.2%) had been advised to stop smoking; such advice came from family members (38%) and the church (26.4%). Place of residence was correlated (p=0.002\*) with willingness to quit smoking. Over half of respondents linked smoking with Cancer, Asthma, Cough, Heart Disease, Kidney disease, Liver Disease, Respiratory Disease, Lung cancer, Stained teeth, Bad breadth, Reduced life-span and Death. 48.9% expressed their willingness to quit smoking; 43.7% and 22.8% respectively were in support of banning smoking inside family houses and on the streets; 34% of the recipients were in support of restricting advertisement of cigarette in media whereas, 26.6% recommended that cigarette manufacture should be banned in Nigeria. Aggressive public enlightenment is indicated in this community.

Keywords: Smoking, Health effects, Cessation, Amassoma, Bayelsa, Nigeria.

#### INTRODUCTION

Tobacco related death for secondhand smokers has led to 4900 deaths and one in every 5 deaths in the United State of America. The economic cost for cigarette smokers is more than 193 billion dollar with about 10 billion for health care for secondhand smokers [1].

Today, smokers know that smoking is bad due to the threat to public health. In the United States of America, 60% of tobacco induced diseases were attributed to cigarette smoking which eventually results to death [2]. Smoking also affects the brain, resulting to poor cognitive functioning in later life, as well as low cognitive flexibility and memory lost. In Alzheimer's disease, 14% of cases are linked to smoking globally. Cigarette smoking has resulted to brain atrophy and reduced cortical volume in few of the cortical regions. This may be linked to the thickening of the cortex. It is not clear if some of the above effects are reversible because most smokers smoke into old age. Quitting smoking at young age might reverse the effect of the cortical thinning of the brain [3]. Therefore, there is urgent need to stop smoking sequel to the potential health implications [4].

The enactment of smoke free workplaces has helped second-hand smokers from diseases. Originating from smoking, also it has improved tobacco smoking companies in the area of their sales. Also the enactment of smoke free law will have a lot of economic implications on smokers and drop the sales of owners of restaurants and bars [5]. Here the aim of this study is to evaluate the awareness of the effects of smoking, perception of smoking policies and cessation scenarios among smokers in Amassoma, Nigeria

#### METHODS

#### Study population

This study was conducted in Amassoma community in Southern Ijaw Local Government Area of Bayelsa State, South- South region of Nigeria with a population of 20,000 peoples.

#### **Study Design and Sample**

254 questionnaires were administered randomly to recipients that consented after carefully explaining the objective of the study. The sample size was calculated using the formula for evaluating the sample size population [6]. The questionnaire was designed to obtain knowledge of smoking health effects, cessation scenarios and perception of smoking policies.

### **Data Analysis**

Data obtain was analyzed using SPSS version 20 spread sheet for descriptive and inferential statistic. A t-test was also conducted using one way ANOVA.

## RESULTS

#### Demography

Respondents were majorly single with more males; most had secondary education and aged 18-30

years. The respondents were basically civil servants with a low income; majority were Christians and of the Ijaw tribe.

#### Smokers' Knowledge of Effect of Smoking on Lifespan

Majority of respondents (94.3%) indicated that they were aware that smokers are liable to die young; 38.3% still smoked because they believed that a person would die by one cause or the other; 24.8% still smoked because they were addicted to it, 22% smoked because they did not believe smokers would die young. Table 1

#### Adverse Effects experienced by smokers

Respondents reported Coughing (76.1%), Irritation (35.3%) and Headache (33.1%) as major adverse effects they manifested due to smoking. Table 1

| Variable   |                                 | Frequency (n=141) |           | Percentage          |            |  |  |  |
|--|---------------------------------|-------------------|-----------|---------------------|------------|--|--|--|
|  |                                 |                   |           |                     |            |  |  |  |
| Are you aware of the label that smokers are liable to die young? |                                 |                   |           |                     |            |  |  |  |
| Yes  |                                 | 133               |           | 94.3                |            |  |  |  |
| No   |                                 | 8                 |           | 5.7                 |            |  |  |  |
| If yes, why do you contin  | ue to sm                        | oke?              |           |                     |            |  |  |  |
| Addicted to it   |                                 | 35                |           | 24.8                |            |  |  |  |
| One will die somehow   |                                 | 54                |           | 38.3                |            |  |  |  |
| Don't believe it   |                                 | 31                |           | 22.0                | 22.0       |  |  |  |
| Cannot do without it   |                                 | 19                |           | 13.5                |            |  |  |  |
| Pressure from peer group   |                                 | 2                 |           | 1.4                 |            |  |  |  |
| Variable   | Does cigarette smoke induce any |                   |           | of the following in |            |  |  |  |
|  | you?                            |                   |           |                     |            |  |  |  |
|  | Yes                             |                   | No        | Not sure            | Total      |  |  |  |
|  | N (%)                           |                   | N (%)     | N (%)               | N (%)      |  |  |  |
| Irritation   | 85(35.3                         | 8)                | 134(55.6) | 22(9.1)             | 241(100.0) |  |  |  |
|  |                                 |                   |           |                     |            |  |  |  |
| Vomiting   | 33(14.0)                        |                   | 167(70.8) | 36(15.3)            | 236(100.0) |  |  |  |
|  |                                 |                   |           |                     |            |  |  |  |
| Coughing   | 181(76.1)                       |                   | 45(18.9)  | 12(5.0)             | 238(100.0) |  |  |  |
|  |                                 |                   |           |                     |            |  |  |  |
| Headache   | 78(33.1)                        |                   | 80(33.9)  | 78(33.1)            | 236(100.0) |  |  |  |
|  |                                 |                   |           |                     |            |  |  |  |
| Congestion   | 49(20.9                         | ))                | 121(51.7) | 64(27.4)            | 234(100.0) |  |  |  |
|  |                                 |                   |           |                     |            |  |  |  |

# Respondents' Knowledge of the Adverse Effects of Smoking on health

All respondents (smokers and non-smokers alike) reported their knowledge of the link between smoking and some diseases and signs/symptoms as detailed in Table 2. Over half of respondents linked smoking with Cancer, Asthma, Cough, Heart Disease, Kidney disease, Liver Disease, Respiratory Disease, Lung cancer, Stained teeth, Bad breadth, Reduced lifespan and Death. Less than half respondents linked smoking with Bronchitis, Pneumonia, Skin disease, Brain damage, Stroke, Stomach ulcer / cancer, Cervical cancer, Emphysema, Malaria, Typhoid and Impotence.

| Variable          | Are you aware t  | Total      |            |              |
|-------------------|------------------|------------|------------|--------------|
|                   | diseases/complic |            |            |              |
|                   | Yes              | No         | Not sure   |              |
| Cancer            | 151(61.9%)       | 78(32.0%)  | 15(6.1%)   | 244(100.0%)  |
| Bronchitis        | 56(23.6%)        | 118(49.8%) | 63(26.6%)  | 237(100.0%)  |
| Pneumonia         | 48(20.3%)        | 113(47.7%) | 76(32.1%)  | 237(100.0%)  |
| Asthma            | 133(56.1%)       | 61(25.7%)  | 43(18.1%)  | 237(100.0%)  |
| Malaria           | 35(14.8%)        | 146(61.6%) | 56(23.6%)  | 237(100.0%)  |
| Typhoid           | 18(7.6%)         | 148(62.4%) | 71(30.0%)  | 237(100.0%)  |
| Impotence         | 37(15.6%)        | 116(48.9%) | 84(35.4%)  | 237(100.0%)  |
| Cough             | 210(87.1%)       | 20(8.3%)   | 11(4.6%)   | 241(100.0%)  |
| Skin Disease      | 71(29.9%)        | 104(43.9%) | 62(26.2%)  | 237(100.0%)  |
| Heart Disease     | 168(71.2%)       | 33(14.0%)  | 35(14.8%)  | 236(100.0%)  |
| Kidney Disease    | 141(59.0%)       | 55(23.0%)  | 43(18.0%)  | 239(100.0%)  |
| Liver Disease     | 160(66.9%)       | 33(13.8%)  | 46(19.2%)  | 239(100.0%)  |
| Reduced life span | 124(52.5%)       | 68(28.8%)  | 44(18.6%)  | 236(100.0%)  |
| Death             | 143(59.8%)       | 58(24.3%)  | 38(15.9%)  | 239(100.0%)  |
| Resp. Diseases    | 169(80.0%)       | 41(17.2%)  | 28(11.8%)  | 238(100.0%)  |
| Heart Diseases    | 165(69.6%)       | 34(14.3%)  | 38(16.0%)  | 237(100.0%)  |
| Brain damage      | 82(34.50%)       | 95(39.90%) | 61(25.60%) | 238(100.00%) |
| Heart attack      | 104(43.7%)       | 81(34.0%)  | 53(22.3%)  | 238(100.0%)  |
| Stroke            | 49(20.7%)        | 109(46.0%) | 79(33.3%)  | 237(100.0%)  |
| Grey/dull Skin    | 37(15.7%)        | 104(44.1%) | 95(40.2%)  | 236(100.0%)  |
| Stomach ulcer     | 66(27.8%)        | 86(36.3%)  | 85(35.9%)  | 237(100.0%)  |
| Stomach Cancer    | 65(27.8%)        | 101(43.2%) | 68(29.1%)  | 234(100.0%)  |
| Cervical cancer   | 60(25.3%)        | 107(45.1%) | 70(29.5%)  | 237(100.0%)  |
| Lung cancer       | 131(55.0%)       | 53(22.3%)  | 54(22.7%)  | 238(100.0%)  |
| Emphysema         | 38(16.7%)        | 95(41.7%)  | 95(41.7%)  | 228(100.0%)  |
| Stained teeth     | 200(83.70%)      | 21(8.80%)  | 18(7.50%)  | 239(100.00%) |
| Bad breath        | 197(82.4%)       | 33(13.8%)  | 9(3.8%)    | 239(100.0%)  |

| Table 2: | <b>Respondents'</b> | Knowledge of the | adverse | effects of | smoking |
|----------|---------------------|------------------|---------|------------|---------|
|          |                     |                  |         |            |         |

#### **Cessation Efforts**

Regarding smoking cessation, 48.9% would like to quit smoking; 70.9% found it difficult to quit smoking; 46.8% had attempted quitting smoking; 25.7%, once, 32.9% twice and 31.4% more than 3 times. Reasons adduced for the failed quit attempts included extreme temptation (62.9%), withdrawal symptoms (18.6%) and pressure from friends (18.6%). See Table 3.

| Table 5: Cessation Efforts                     |                   |            |  |  |  |  |  |
|--|-------------------|------------|--|--|--|--|--|
| Variable                                       | Frequency (n=141) | Percentage |  |  |  |  |  |
| Would you like to stop smoking                 |                   |            |  |  |  |  |  |
| Yes  | 69                | 48.9       |  |  |  |  |  |
| No   | 72                | 51.1       |  |  |  |  |  |
| Do you find it difficult to stop smoking       |                   |            |  |  |  |  |  |
| Yes  | 100               | 70.9       |  |  |  |  |  |
| No   | 41                | 29.1       |  |  |  |  |  |
| Have you ever attempted to stop smoking?       |                   |            |  |  |  |  |  |
| Yes  | 65                | 46.8       |  |  |  |  |  |
| No   | 74                | 53.2       |  |  |  |  |  |
| How many times have you tried to stop smoking? |                   |            |  |  |  |  |  |
| Once   | 18                | 25.7       |  |  |  |  |  |
| Twice  | 23                | 32.9       |  |  |  |  |  |
| Thrice   | 7                 | 10.0       |  |  |  |  |  |
| >Thrice  | 22                | 31.4       |  |  |  |  |  |
| Can you tell why the attempt(s) failed?        |                   |            |  |  |  |  |  |
| Pressure from friends                          | 13                | 18.6       |  |  |  |  |  |
| Too much temptation                            | 44                | 62.9       |  |  |  |  |  |
| Withdrawal symptoms                            | 13                | 18.6       |  |  |  |  |  |

Table 3: Cessation Efforts

#### **Smoking Cessation and Advice**

Majority of the smokers (91.2%) had been advised to stop smoking; such advice came from family members (38%), the church (26.4%), friends (19.0%) and hospital (12.4%). For non- smokers, major influencing factors for non-indulgence were friends (100%), family (100%) and the church (100%). For previous smokers, major influencing factors for quitting were religion (26.7%), friends (23.3%), health reasons (16.7%), family (16.7%) and self-determination (13.3%). About half the smokers (48.9%) expressed their willingness to quit smoking. Most respondents were willing to advise their friends (80.3%) and relatives (80.1%) to stop smoking. See Table 4

| Table 4: Smoking Cessation and Advice                          |                                 |            |  |  |  |  |  |
|--|---------------------------------|------------|--|--|--|--|--|
| Variable   | Frequency                       | Percentage |  |  |  |  |  |
| Have you ever been advised to stop smoking? (n=137)            |                                 |            |  |  |  |  |  |
| Yes  | 125                             | 91.2       |  |  |  |  |  |
| No   | 12                              | 8.8        |  |  |  |  |  |
| If yes, state the source(s) of the advice (n=                  | =121)                           |            |  |  |  |  |  |
| Friends  | 23                              | 19.0       |  |  |  |  |  |
| Family Members   | 46                              | 38.0       |  |  |  |  |  |
| Church   | 32                              | 26.4       |  |  |  |  |  |
| School   | 3                               | 2.5        |  |  |  |  |  |
| Clubs  | 1                               | 0.8        |  |  |  |  |  |
| Hospitals  | 15                              | 12.4       |  |  |  |  |  |
| Internet   | 1                               | 0.8        |  |  |  |  |  |
| If you never smoked, what influenced you not to smoke?         |                                 |            |  |  |  |  |  |
| Friends  | 26                              | 100.0      |  |  |  |  |  |
| Family member  | 53                              | 100        |  |  |  |  |  |
| Church   | 37                              | 100.0      |  |  |  |  |  |
| If you have stopped smoking, what influe                       | nced you to stop smoking (n=30) |            |  |  |  |  |  |
| Friends  | 7                               | 23.3       |  |  |  |  |  |
| Family   | 5                               | 16.7       |  |  |  |  |  |
| Religion   | 8                               | 26.7       |  |  |  |  |  |
| Health reasons   | 5                               | 16.7       |  |  |  |  |  |
| Advert   | 1                               | 3.3        |  |  |  |  |  |
| Self-determination   | 4                               | 13.3       |  |  |  |  |  |
| Are you willing to advise your friend to stop smoking? (n=239) |                                 |            |  |  |  |  |  |
| Yes  | 192                             | 80.3       |  |  |  |  |  |
| No   | 47                              | 19.7       |  |  |  |  |  |
| Are you willing to advise a relative to stop smoking? (n=236)  |                                 |            |  |  |  |  |  |
| Yes  | 189                             | 80.1       |  |  |  |  |  |
| No   | 47                              | 19.9       |  |  |  |  |  |

#### **Cross Tabulations**

Table 5 shows the results of the correlation between respondents' willingness to quit smoking with demographic characteristics. Data revealed that only place of residence was correlated (p=0.002\*) with willingness to quit smoking; Gender, Marital status, Age, Education, occupation and average annual income were not correlated (p>0.05)

#### **Perception of Smoking in Public Places**

Table 6 provides details of the respondents' perceptions of policies. Regarding policy of smoking in schools, buses, churches, mosques, plane, Hospitals and airport, more that 50% was against smoking in public places; 43.7% and 22.8% respectively were in support of banning smoking Inside family houses and On the streets; 34% of the recipients were in support of restricting advertisement of cigarette in media whereas, 26.6% recommended that cigarette manufacture should be banned Nigeria. Overall, 64.2% had positive perception on smoking policy.

| Variable                      | Would you like to stop smoking: N (%) |          |          |          | Total           |              | -value |
|-------------------------------|---------------------------------------|----------|----------|----------|-----------------|--------------|--------|
|                               | Yes                                   |          | No       |          |                 |              |        |
| Gender                        |                                       |          |          |          |                 |              |        |
| Male                          | 60(42.6)                              |          | 61(43.3) | 1        | 121(85.8)       |              |        |
| Female                        | 9(6.4)                                |          | 11(7.8)  | 2        | 20(14.2)        |              | .704   |
| Marital status                |                                       |          |          |          |                 |              |        |
| Single                        | 32(2                                  | 2.7)     | 30(21.3  | 6        | 62(44.0)        |              |        |
| Married                       | 26(1                                  | 8.4)     | 27(19.1) | 4        | 53(37.6)        |              |        |
| Widowed                       | 5(3.5                                 | 5)       | 2(1.4)   | 7        | 7(5.0)          |              | .218   |
| Divorced                      | 2(1.4                                 | 4)       | 9(6.4)   | ]        | 11(7.8)         |              |        |
| Separated                     | 4(2.8                                 | 3)       | 4(2.8)   | 8        | 8(5.7)          |              |        |
| Age group (years)             |                                       |          |          |          |                 |              |        |
| 18-30                         | 27(1                                  | 9.1)     | 20(14.2) | 2        | 47(33.3)        |              |        |
| 31-45                         | 21(1                                  | 4.9)     | 31(22.0) | 4        | 52(36.9)        |              |        |
| 46-60                         | 16(1                                  | 1.3)     | 19(13.5) | ~ .      | 35(24.8)        |              | .217   |
| Above 60                      | (53.5                                 | 5)       | 2(1.4)   | 7        | 7(5.0)          |              |        |
| Education                     |                                       |          |          |          |                 |              |        |
| Primary                       | 16(11.3)                              |          | 13(9.2)  | 2        | 29(20.6)        |              |        |
| Secondary                     | 21(14.9)                              |          | 30(21.3) | -        | 51(36.2)        |              | .187   |
| Tertiary                      | 19(1                                  | 3.5)     | 23(16.3) | 4        | 42(29.8)        |              |        |
| None                          | 13(9.2)                               |          | 6(4.3)   | ]        | 9(13.5)         |              |        |
| Occupation                    |                                       |          |          |          |                 |              |        |
| Student                       |                                       | 17(12.1) | 14(9.9)  |          | 31(22.0)        |              |        |
| Civil servant                 |                                       | 6(4.3)   | 9(6.4)   |          | 15(10.6)        | 5(10.6)      |        |
| Retired                       |                                       | 3(2.1)   | 3(2.1)   |          | 6(4.3)          | b(4.3) 0.840 |        |
| Military                      |                                       | 3(2.1)   | 4(2.8)   |          | 7(5.0)          |              |        |
| Farming                       |                                       | 6(4.3)   | 9(6.4)   |          | 15(10.6)        |              |        |
| Artisan                       |                                       | 1(0.7)   | 0(0.0)   |          | 1(0.7)          |              |        |
| Driver                        |                                       | 17(12.1) | 11(7.8)  |          | 28(19.9)        |              |        |
| Business                      |                                       | 8(5.7)   | 11(7.8)  |          | 19(13.5)        |              |        |
| Teaching                      |                                       | 2(1.4)   | 2(1.4)   |          | 4(2.8)          |              |        |
| Others                        |                                       | 6(4.3)   | 9(6.4)   |          | 15(10.6)        |              |        |
| Average annual income (Naira) |                                       |          |          |          |                 |              |        |
| 50-100k                       |                                       | 41(29.1) | 29(20.6) |          | 70(49.6)        |              |        |
| 101-500k                      | 1-500k 19(13.5)                       |          | 29(20.6) | 48(34.0) |                 |              |        |
| 501k-1m                       | 4(2.8)                                |          | 10(7.1)  |          | 14(9.9)         |              | 0.105  |
| 1-2m                          | 1(0.7)                                |          | 2(1.4)   | 3(2.1)   |                 |              |        |
| Above 2m 4(2.8)               |                                       | 4(2.8)   | 2(1.4)   |          | 6(4.3)          |              |        |
| Place of residence            |                                       |          |          |          |                 |              |        |
| Urban                         |                                       | 18(12.8) | 18(12.8) |          | 36(25.5)        |              |        |
| Rural                         | 36(25.5)                              |          | 52(36.9) |          | 88(62.4) 0.002* |              | 0.002* |
| Semi urban                    |                                       | 15(10.6) | 2(1.4)   |          | 17(12.1)        |              |        |

 Table 5: Cross-tabulation on smoking cessation and some demographic data (n=141)
 Image: Cross-tabulation on smoking cessation and some demographic data (n=141)

| Variable   | Strongly<br>Agree | Agree    | Neutral   | Disagree | Strongly<br>Disagree |  |  |
|--|-------------------|----------|-----------|----------|----------------------|--|--|
|  |                   |          | N (%)     |          |                      |  |  |
| Schools  | 153(62.4)         | 25(10.2) | 35(14.3)  | 12(4.9)  | 20(8.2)              |  |  |
| Buses  | 132(53.7)         | 33(13.4) | 31(12.6)  | 24(9.8)  | 26(10.6)             |  |  |
| Churches   | 171(69.0)         | 35(14.1) | 15(6.0)   | 2(0.8)   | 25(10.1)             |  |  |
| Mosques  | 133(54.7)         | 44(18.1) | 39(16.0)  | 9(3.7)   | 18(7.4)              |  |  |
| Markets  | 41(16.7)          | 22(9.0)  | 70(28.6)  | 72(29.4) | 40(16.3)             |  |  |
| Fast-food joints   | 48(19.8)          | 29(11.9) | 108(44.4) | 45(18.5) | 13(5.3)              |  |  |
| Restaurants  | 50(20.4)          | 27(11.0) | 103(42.0) | 52(21.2) | 13(5.3)              |  |  |
| Plazas   | 50(20.3)          | 32(13.0) | 118(48.0) | 33(13.4) | 13(5.3)              |  |  |
| Inside family houses   | 70(28.6)          | 37(15.1) | 48(19.6)  | 45(18.4) | 45(18.4)             |  |  |
| On the streets   | 32(13.0)          | 24(9.8)  | 48(19.5)  | 57(23.2) | 85(34.6)             |  |  |
| Trains   | 99(40.6)          | 52(21.3) | 61(25.0)  | 15(6.1)  | 1797.0)              |  |  |
| Planes   | 143(58.6)         | 43(17.6) | 32(13.1)  | 7(2.9)   | 19(7.8)              |  |  |
| Hospitals  | 171(69.5)         | 24(9.8)  | 18(7.3)   | 6(2.4)   | 27(11.0)             |  |  |
| Airports   | 124(50.8)         | 39(16.0) | 41(16.8)  | 13(5.3)  | 27(11.1)             |  |  |
| Motor Parks  | 28(11.5)          | 19(7.8)  | 73(29.9)  | 46(18.9) | 78932.0)             |  |  |
| Hotels   | 25(10.3)          | 29(12.0) | 75(31.0)  | 67(27.7) | 46(19.0)             |  |  |
| Beer parlours  | 28(11.7)          | 19(7.9)  | 4619.2)   | 59(24.6) | 88(36.7)             |  |  |
| That Government should seriously restrict cigarette advertisement in the media |                   |          |           |          |                      |  |  |
|  | 49(20.3)          | 33(13.7) | 58(24.1)  | 41(17.0) | 60(24.9)             |  |  |
| That Government should ban cigarette manufacture in Nigeria                    |                   |          |           |          |                      |  |  |
|  | 40(16.6)          | 24(10.0) | 54(22.4)  | 36(14.9) | 87(36.1)             |  |  |

#### DISCUSSION Demography

#### The recipients were majorly single with more male respondents. Most of the respondents had secondary education. This might have resulted to high literacy level in the community. The age bracket of the recipients was mostly within 18-30 years, showing involvement of more youths in the study. The respondents were basically civil servants with a low income that found it difficult to meet up with their family demands. Majority were Christians, which was not surprising because it is believed that Christian worshippers are more dominant in South- South of Nigeria. Also majority of the recipients were I jaw speaking people. This is in line with other reports, since the above community is an Ijaw community and more people from this tribe should be expected [7].

### Health Consequences of Smoking

Almost all the recipients reported that smokers are liable to die young. However, it has not deterred smoking. The respondents still smoked with the confidence that someone will die one day. This is in line with a report showing that respondents are aware of the effect that smokers are liable to die young but still engaged in smoking [8].

#### Smokers' reported adverse effects due to smoking

Regarding side effects that are associated with smoking, majority of respondents (76.1%) reported that cough was a major adverse effect of smoking that they experienced. This is similar to other report showing the reason that it might be due to the weakening of the lungs arising from accumulation of toxin in the respiratory system that resulted to cough [9]. Also more than half of the smokers reported that they experienced vomiting as one of the side effects which may be triggered by the chemical content of cigarette such as nicotine. Tobacco smokers are often associated with several hazards that can eventually lead to reduction of the smokers' and second-hand smokers' life span.

# Respondents' Knowledge of the Effects of Smoking on Health

Over half of the respondents (smokers and non-smokers) linked smoking with Cancer, Asthma, Cough, Heart Disease, Kidney disease, Liver Disease, Respiratory Disease, Lung cancer, Stained teeth, Bad breadth, Reduced life-span and Death. This was a demonstration of high level of knowledge of the adverse consequences of smoking on health. Similar knowledge has been demonstrated in other studies [8, 10]. The paradox is that such high knowledge does not always translate into positive practice. There are still gaps in the people's knowledge of the adverse effects of

smoking as few respondents linked smoking with Bronchitis, Pneumonia, Skin disease, Brain damage, Stroke, Stomach ulcer / cancer, Cervical cancer and Emphysema. Thus, there is need to strategize on ways of increasing their knowledge of the grievous effects of smoking on health. The fact remains that tobacco use in any form is injurious to the health of the consumers and it is globally regarded as one of the predominant etiologies of preventable morbidity and mortality leading to many causes of premature deaths [11-13]. Factually, over 50 of the thousands of chemicals in cigarette have been shown to cause Cancer. The projections are that mortality will increase to 12 million come year 2050 [14]. Tobacco adversely affects most systems of the human body: its effect is slow. cumulating over a period of time before adverse health effects begin to manifest. People in Amassoma community are in dire need of acquiring the vital information which might motivate them to quit or resist smoking. Additionally, smoking cessation programmes are urgently indicated in this community.

#### **Smoking Cessation**

Regarding willingness to stop smoking, few of the respondents indicated they were willing to stop smoking. Almost all smokers had attempted to stop smoking due to the health and economic challenges. The reasons why smokers find it difficult to stop smoking is linked to addiction and influence by peer groups and relatives [15, 16].

Almost all the recipients reported they had been advised to quit smoking by friends and family members. The recipients that quitted smoking also stated the influence of friends and religion as major factor that enabled them to quit smoking. In the same vein, due to the advice from friends, family and religion, other smokers were ready to quit smoking at the time of this study. It is eminent that the above factors help smokers to quit smoking. Studies have shown that family, friends, mostly those of the nonsmokers, and religion are major factors that have served as facilitator in quitting smoking [17].

Quitting of smoking is difficult, regardless of the smoker's intention. This arises from the fact that persistent smokers get addicted to the nicotine content very easily. Further, pressures from peers and family have been shown to discourage smoking cessation [18, 19]. Programmatic cessation activities are needed to facilitate the quitting process; smoke addicts may require phases of weaning, psychotherapy, and other supports to help them quit. Regarding smoker's preparedness to quit smoking, gender, marital status, age, educational level, occupation and income showed no statistical significance except for place of residence with a p value of 0.002. Therefore, educational and any other strategies to facilitate smoking cessation in this community will need to be generalized, targeting the community as a whole.

# Perception of Smoking in Public Places, Cigarette Advertisement and Manufacture

Regarding policy of smoking in schools, buses, churches, mosques, aircrafts, hospitals and airport, more than 50% was against smoking in these public places. This is not surprising considering the hazard it can cause in humans. Several studies have also enumerated the effect of smoking in public places and the need to ban smoking in public places [20]. Reports from other studies have shown that the banning of smoking in public places has led to reduction in health hazards such as cardiovascular diseases [21]. In Nigeria, there is poor awareness of the law regarding smoking in public places should be enforced. A case study is Canada and other developed countries where such laws are enforced adequately [23].

On the issue with advertising cigarette in the media, respondents reported that it should be banned due to its negative influence on non-smokers and the current smokers as well. Advertisement increases the prevalence of smoking and it should be banned to reduce its prevalence and the consequent adverse health effects. This is not far- fetched from other studies [24, 25]. The rise in cigarette smoking prevalence in developing countries like Nigeria has been mainly blamed on the aggressive marketing strategies of big tobacco companies [26]. It is therefore expedient on Nigerian Government to discourage advertisement and promotion of tobacco or ban it completely. More frequent messages promoting nonsmoking would be a good strategy to reduce the scourge of smoking. The marketing strategies of the tobacco industry should be adequately censored and action should be taken to promote anti- tobacco advertisement in the media. Few of the respondents also pointed out that advertisement of cigarette should be banned in Nigeria. This is similar with other reports. Hence tobacco advertising and promotion should be completely banned in the Nigerian media as stipulated in 2002 [27].

#### CONCLUSION

Residents of Amassoma have a fairly good knowledge of the adverse effects of smoking on health. Smokers in this community commonly manifest cough and headache as side-effects of smoking. Few smokers were willing to stop smoking; majority smokers had attempted to stop smoking due to the health and economic challenges; reasons for failed quit attempts were addiction and influence by peer groups and relatives. Almost all smokers had been advised to quit smoking by friends and family members; recipients that quitted smoking were influenced by friends and religion. Gender, marital status, age, educational level and occupation were not correlated with willingness to quit smoking but place of residence was correlated. More than half of respondents were against smoking in public places; less than 40% of respondents were in favour of Government restricting cigarette advertisement in the media; less than 30% of respondents were in favour of Government banning cigarette manufacture in Nigeria. There are gaps in the knowledge of the adverse effects of smoking among residents of Amassoma. Further, the level of addiction to smoking among smokers in this community is high. Consequently, intervention strategies are required to enhance the knowledge base. Also, smoking cessation strategies are needed to promote smoking cessation in this community. The influence of peer group, family and religious houses should be factored into any intervention strategies which should be global in outlook, irrespective of gender, age, education, marital status, occupation or place of residence.

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