



Smoking Prevalence and Knowledge about Its Health Implications among Health Care Professional Students in Ekiti State, South-Western Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Author OAA designed the study, performed the statistical analysis and writes the manuscript. Author FEE helped in the study design and data collection. Both authors read and approved the final manuscript.

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ABSTRACT

Aims: This study examined smoking prevalence and knowledge about its health implications among health care professional students in Ekiti State, South-Western Nigeria.

Theoretical Framework: The Precede-Proceed Model was the theoretical framework for the study.

Methodology: The research design for the study was quantitative. The sample size was determined using the rule of thumb. Simple random sampling technique was used in choosing the participants and sampling techniques was purposive and convenience. Self-developed questionnaire was the instrument used for data gathering. Data from the study was analyzed using both descriptive and inferential statistics.

Results: The findings revealed that 21.6% of the participants have ever smoked cigarette and the majority (77.3%) smoked daily while 89.7% of the participants indicated that they smoked less than 10 cigarettes stick a day and 6.9% smoked more than 30 sticks daily. One-third (34.4%) of the participants commenced smoking between the age of 18 to 21 years while 27.6% between age 16

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to 17 years. Almost half (45.2%) of the participants were introduced to cigarette smoking by their peers. The majority (55.0%) of the participants took their cigarette from friends while 35.0% normally bought from the shops. Almost all (99.1%) of the participants were aware of the health risks that are associated with cigarette smoking, almost all (99.1%) and 81.8% of the participants indicated lung cancer while the remaining 18.2% highlighted cancer of the bladder. Also, 93.6% indicated that there was no tobacco treatment centre in their institution.

Conclusion: The study recommended that Nurses and Midwives should ensure that comprehensive individual and group education is done in the clinics and during school health visits, to increase adolescents' knowledge regarding the health effect of cigarette smoking.

Keywords: Knowledge; smoking prevalence; health effects.

1. INTRODUCTION

Globally, between 82,000 and 99,000 young people start smoking everyday [1]. Smoking can cause many health effects including various types of cancers, cardiovascular disease as well as respiratory disease, and it can also impose a significant financial and social burden on the society. Therefore smoking prevention remains an important public health concern [1]. Tobacco smoking is one of the leading causes of diseases and death, between 1950 and 2000 approximately 70 million people died from tobacco use [2]. The tobacco smoke contains nicotine and harmaline which is a monoamine oxidase (MAO) inhibitor, and the combination of both result in addictive stimulant and euphoriant properties [2].

Cigarette smoke is a complex mixture of chemicals produced by burning tobacco and the additives, it contains tar, which has more than 4,000 chemicals and many of these chemicals are known to cause cancer. Thus, cigarette smoking can result in many fatal respiratory disorders such as chronic obstructive lung disease (emphysema and chronic bronchitis), ischemic heart disease, and various types of cancers such as lung, bladder, upper respiratory tract and pancreas [3].

Globally, during the last two decades cigarette production has increased at an average of 2.2% each year, out spacing the population growth rate of 1.7% [2]. The prevalence of smoking in Nigeria is reported to be 8.9% in the general population [2]. However, the distribution of smoking is not the same across all strata of the society. It varies from 7.7% among female secondary schools, 17.1% among secondary school students, 17.7% among health professional students, and 37.9% among the general population in northern part of the country [4].

Health-care professionals represent an important part of the population as they are the care providers, who are expected to advance the anti-smoke message to the general public [2]. Therefore, health care providers who indulge in smoking are regarded as poor example of people who are promoting positive health behaviours and they have the potential to unintentionally affect the smoking behaviours of others through modelling. It was estimated that about 70% of smokers visit physicians each year with substantial opportunity to influence smoking behaviour. Medical advice to quit smoking can produce a year abstinence rate of up to 5-10%, which would have a significant public health impact if it were provided. However, there are many barriers that are responsible for the reduction in the effectiveness or willingness of health care professionals to provide patient counselling and they include, time constraints during consultation as well as the smoking status of the health care professional [1].

It was reported that smoking is a real problem among medical students irrespective of the level in which they are enrolled [5]. Smoking often starts in early adolescence and addiction can occur rapidly [1]. Smoking is socially patterned, with high smoking prevalence among people of low socio-economic status; smoking is the leading cause of health inequalities. Addressing inequalities in tobacco use is therefore a public health priority [1]. The health consequences of cigarette smoking can be slow, gradual, or cumulative. Tobacco smoke is mild enough to be inhaled in an overdose quantities and its addiction has historically been one of the hardest addictions to break. Although the hazards of smoking are well-known, the number of smokers among adolescent students is still high. Factors influencing adolescent students to smoke include their socio-economic status, the environment and having parents, siblings or friends who smoke [1,6].

The adverse effect of tobacco smoking on health has been established and on an average, cigarette smokers die ten years younger than non-smokers [7]. There is increasing evidence that contact with smokers, particularly family members increases ones risk of smoking. Moreover, the health impact of smoking will be more among adolescents of today due to the early initiation of smoking as well as in the case of adolescents who smoke during adulthood and adolescents who have become habitual smokers due to long term use and these adolescents are more likely to develop cancer and cardiovascular diseases [7].

Efforts to delay or prevent children from smoking is necessary because the earlier a child starts to smoke the less likely they are to quit the habit as adult, and the more likely such a person dies prematurely from smoking related diseases [1]. Ebirim et al. [6] stated that despite the growing problem of global cigarette use, accurate information on the prevalence as well as the pattern among Nigerian adolescents remains sparse. Hence, the study seeks to assess the knowledge of medical students towards the health implications of tobacco smoking and to determine the prevalence and their attitude towards tobacco smoking. The findings of the study will depict the factors predisposing medical students towards smoking and also create awareness in promoting attitudinal change towards tobacco smoking.

1.1 Theoretical Framework

The Precede-Proceed Model [8] was the theoretical framework for the study. Precede-Proceed model provides a comprehensive structure for assessing health and quality-of-life. It was proposed in 1974 by Dr. Lawrence W. Green, it is a cost-benefit evaluation framework that that can help health program planners, policy makers, and other evaluators to analyze situations and design health programs efficiently [8]. The theory was used to assess health related behaviours and environments that affect health and quality of life. The framework has two components. The set of phases consists of series of planned assessments that generate information that can be used to guide subsequent decision.

Precede is an acronym for predisposing, reinforcing, enabling, constructs in educational diagnosis and evaluation. It consists of three phases, the first phase, social assessment and situational analysis which concern quality of life

or social problem determination as well as the needs of a given population. The second phase is epidemiological assessment to identify health determinants of these problems and it also involves analysing the behaviour and environmental factors that link to the health problems. Educational and ecological assessment is the third phase; it involves the causal factors influencing health behaviours or environmental factors. These factors are grouped into three: predispose, reinforce, and enable factors [9].

The second component is referred to as proceed for policy, regulatory, and organizational constructs in educational and environmental development (phase 4, 5, and 6). These three phases involve the strategic implementation of multiple actions based on the findings from assessment in the initial phase. Precede-Proceed model provides a continuous series of phases in planning, implementation, and evaluation [9]. Fig. 1 illustrates a diagram explains the Precede-Proceed model.

In application of this theory to this study, this study focuses on smoking among adolescents. In order to understand the influencing factors for smoking among health professional students, it will be important to develop anti-smoking public health programs. This study will only address the third phase of the Precede-Proceed Model. This particular phase assesses the cause of health behaviour (smoking). This phase was used to identify the three important factors that play important roles in changing a person's behaviour as well as the environment. These factors are predisposing factors, enabling factors, and reinforcing factors.

The predisposing factors are antecedents to behaviour change that provide the motivation for the behaviour. They include individual or population knowledge, attitudes, belief, and perceptions that facilitate or hinder motivation for change [9]. Enabling factors are antecedents to behaviour or environment change that allow a motivational or environment policy to be realized. It includes accessibility, availability, skills and laws that can help or hinder the behavioral changes along with the environmental factors [9]. This study explores the accessibility to cigarettes and peer smoking as enabling factors. Reinforcing factors are factors following behaviour that provide the continuing reward or punishment as a consequence of behaviour. It consists of social support, peers influence, advice and feedback by health care providers.

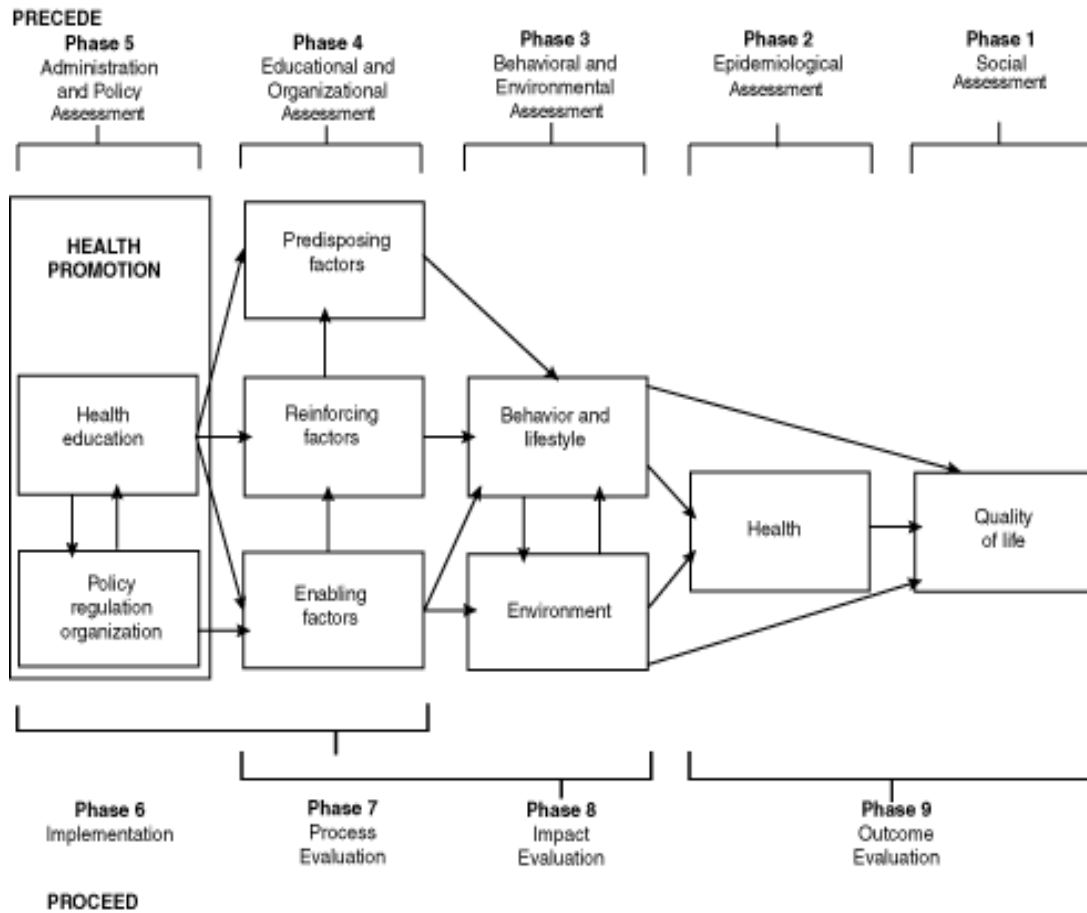


Fig. 1. The precede-proceed model (Green & Keuter, 2005)

In conclusion, the Precede-Proceed model is a participatory model for creating successful community health promotion and other public health interventions. It is a multi-assumptions model for intervention for health behaviour change. It is based on the premise that behaviour changes are voluntary, and that health programs are more likely to be effective if they are planned and evaluated. Identification of these factors may be useful to provide interventions required towards behaviour change as the outcome and to conduct prevention and control measures of smoking among medical students.

2. METHODOLOGY

This research is a descriptive study aimed at finding out the knowledge of medical students about the health effects of smoking in the university. The study was conducted in Afe Babalola University, Ado-ekiti, Ekiti State Nigeria. The total number of students in the College of Medicine and Health Sciences of Afe Babalola

University was about 1,600, since the target population of this research was limited to students in the Department of Medicine, Nursing Science and Medical Laboratory Science, the population was reduced to 506. The sample size was determined using the rule of thumb, therefore, 24% of the target population, which is 120 students was selected for the study. The simple random sampling technique was used in choosing the participants. The sampling techniques was purposive and convenience. Self-developed questionnaire was the instrument used for data gathering. The questionnaire has two sections. Section A investigated the demographic characteristics of the participants. Section B was on questions that sought to assess the knowledge of medical students towards the health implications of tobacco smoking and to determine the prevalence and their attitude towards tobacco smoking. The reliability of the questionnaire was done using the test-retest method.

The research proposal was approved by the Department of Nursing Science, Afe Babalola University, Ado-Ekiti. Before the commencement of the study, approvals were obtained from The Research Ethics Committee of Afe Babalola University. Written and verbal informed consent was sought and obtained from participants before administration of the questionnaire. Participation was made voluntary without coercion, manipulation or undue inducement. The participants were told that they could freely withdraw at any point during the study process. The researcher administered the questionnaire to the participants. The questionnaires were retrieved from the participants immediately after completion. There were 120 students recruited for the study out of which 111 responded adequately to the questionnaire. Data gathering was from August to September 2015. Data from the study was analyzed using both descriptive and inferential statistics.

3. RESULTS

The analysis of the socio-demographic status of the participants (Table 1), the majority (81.1%) of the participants were female while 18.9% were males. Table 1 established that the majority 78.4% of the participants were 18-21 years of age while only 1.8% was age 22-25 years old. With regards to participant's religion, 87.3% were Christians while 12.7% were Muslims. Almost all (99.1%) the participants were single and the majority (57.7%) were in their 4th year. Participants were asked about their monthly allowance and more than half (55.8%) of the participants received between N10, 000 to N30, 000 while only 5.8% received above N100, 000.

As shown in Table 2, 73.9% of the participants have never smoked a cigarette before, while 26.1% of the participants responded positively. With regards to participants frequent of smoking, the majority (77.3%) smoked daily while only 3.4% indicated that they smoked every week. When the participants were also asked to indicate the number of cigarette that they smoke daily, the majority (89.7%) of the participants indicated that they smoke less than 10 cigarettes stick a day while 6.9% smoked more than 30 sticks a day.

With respect to participants age at smoking initiation, about one-third (34.4%) of the participants commenced smoking between aged 18 to 21 years, 27.6% between age 16 to 17 years and 31.1 started smoking above the age of

21 years. When asked about the person that introduced them to smoking, almost half (45.2%) of the participants indicated peer group, 16.1% and 9.7% indicated boyfriend and girlfriend respectively while 25.8% said it was their personal choice. With regards to question on what predisposes the participants to smoking, the majority (77.4%) of them stated that they started smoking because of fun, 12.9% was due to peer pressure, while 6.5% indicated stress as what predisposed them to smoking.

Table 1. Demographic profile of participants (N=111)

Socio demographic characteristics	Number	%
Gender		
Male	21	18.9
Female	90	81.1
Age		
14 – 17	2	1.8
18 – 21	87	78.4
22 – 25	20	18.0
26 – 30	2	1.8
Marital status		
Single	110	99.1
Married	1	.9
Religion		
Christianity	96	87.3
Islam	14	12.7
Level of degree		
Second year	2	1.8
Third year	11	9.9
Fourth year	64	57.7
Fifth year	34	30.6
Monthly income		
N10000 – N30000	58	55.8
N40000 – N60000	33	31.7
N70000 - N100000	7	6.7
Above N100000	6	5.8

On the participants' attitudes towards smoking, as revealed Table 3, when the participants were asked if they will smoke a cigarette offered by their best friend, the majority (63.6%) of them indicated definitely not, 12.1% answered probably not and 15.9% indicated probably yes while 8.4% answered definitely yes. With regards to participants probability of smoking in the next 12 months, more than half (65.1%) of the participants indicated definitely not, 13.8% probably not, 11.9% probably yes and 9.2% indicated definitely yes.

As revealed in Table 4, participants were asked if they have ever tried to stop smoking in the past

year and more than half (52.2%) highlighted yes while the remaining 47.8% indicated no. When the participants were asked how they usually obtain their cigarette, the majority (55.0%) of the participants got their cigarette supply from friends while 35.0% indicated that they normally buy from the shops.

Table 2. Predisposing factors to smoking as indicated by the participants

Options	Number	%
Have you ever smoked?		
Yes	29	26.1
No	82	73.9
Total	111	100
How often do you smoke?		
Daily	23	77.3
Weekly	6	22.7
Total	29	100
Number of cigarette smoked daily		
Less than 10	26	89.7
11 – 20	1	3.4
Above 20	2	6.9
Total	29	100
Age of smoking initiation		
12 – 15 years	2	6.9
16 – 17	8	27.6
18 – 21	10	34.4
Above 21 years	9	31.1
Total	29	100
Who introduce you to smoking?		
Peer group	14	45.2
Boyfriend	5	16.1
Girlfriend	3	9.7
Relations	1	3.2
Personal choice	8	25.8
Total	29	100
What led you to smoking?		
Stress	2	6.5
Peer pressure	4	12.9
Fun	24	77.4
Other reasons	1	3.2
Total	29	100

As shown in Table 5, participants were asked if they are aware that smoking is dangerous to their health and almost all (99.1%) of the participants indicated yes with exception of only one (0.9%) participants who indicated no. In addition, when the participants were asked if they are aware of the health risks that are associated with cigarette smoking, almost all (99.1%) of the participants indicated yes with exception of only one (0.9%) participants who indicated no. On the participants' knowledge on the health impacts of

smoking, the majority (81.8%) of them indicated lung cancer while the remaining 18.2% highlighted cancer of the bladder.

Table 3. Attitudes towards smoking

Options	Number	%
Will you smoke a cigarette offer by your friend?		
Definitely not	68	63.6
Probably not	13	12.1
Probably yes	17	15.9
Definitely yes	9	8.4
Total	107	100
Probability of smoking in the next 12 months		
Definitely not	71	65.1
Probably not	15	13.8
Probably yes	13	11.9
Definitely yes	10	9.2
Total	109	100

Table 4. Participants' quitting attempts and access to smoking

Options	Number	%
Quitting attempts		
Yes	12	52.2
No	11	47.8
Total	23	100
Access to cigarette		
From the shop	7	35.0
From friends	11	55.0
Others	2	10.0
Total	20	100

When the participants were asked if they know the benefit of smoking cessation and the majority (65.4%) of the participants indicated yes while the remaining 34.6% indicated no.

Almost all (93.6%) of the participants indicated the absence of a tobacco treatment centre in their institution.

Table 6 shows that 40.2% of the participants strongly agreed that smokers are more popular while 22.3% strongly disagreed. Also, 35.7% of the participants strongly agreed that smoking helps people forget their worries and 26.8% disagreed. 27.7% of the participants strongly agreed that non-smokers dislike being around people who smoke while 17.9% strongly disagreed. Almost half (44.6%) of the participants strongly disagreed that smokers find it hard to get dates while 13.4% strongly agreed. More

than half (53.6%) of the participants strongly disagreed that smoking is something you need to try before deciding to do it or not, 17.9% agreed, 17.9% strongly agreed, while 8.9% disagreed. Almost half (44.6%) of the participants strongly disagreed that there was no harm in having a cigarette while 13.4% agreed. Almost half (44.6%) of the participants strongly disagreed that smoking helps people to relax, 26.8% disagreed, and 8.9% strongly agreed. About one third (34.8%) of the participants disagreed that smoking makes people look sexy while 27.7% strongly disagreed. The majority (53.6%) of the participants strongly disagreed that smoking is enjoyable while 37.5% disagreed. More than half (55%) of the participants strongly agreed that smokers are often stressed while 31.3% agreed. And lastly, the majority (62.5%) of the participants strongly agreed that non-smokers should be proud to be smoke free, 11.6% agreed, 15.1% strongly disagreed, while only 10.7% disagreed. A total of 71.4% of the participants indicated that they will prefer a smoke-free institution.

Table 5. Participants' knowledge of the danger of smoking

Options	Number	%
Do you know that smoking is dangerous to your health?		
Yes	110	99.1
No	1	0.9
Total	111	100
Awareness of the health risks associated with smoking		
Yes	110	99.1
No	1	0.9
Total	111	100
Benefit of smoking cessation		
Yes	68	65.4
No	36	34.6
Total	104	100
Smoking cessation and treatment center		
Yes	7	6.4
No	102	93.6
Total	109	100

SA and SD represent 'strongly agree' and 'strongly disagree', respectively. Participants were asked to tick which of the option was applicable to them.

4. DISCUSSION

In this study, about one-third (34.4%) of the participants commenced smoking between the

age of 18 to 21 years and 27.6% of the participants were between age 16 to 17 years. According to Ebirim et al. [6], the prevalence of ever smoked adolescents was 15.3% and 11.2% for current smokers according to a study conducted using adolescents in Owerri South-Eastern Nigeria. Similarly in this study, 26.1% of the participants do smoked cigarettes and the majority (77.3%) smoked daily. Likewise 89.7% of the participants smoked less than 10 cigarettes stick a day while 6.9% smoked more than 30 sticks daily.

Several smoking surveys have revealed a decline in current cigarette smoking among adults far more prominent among boys than girls. After an initial rise among teenage boys, a decline in cigarette smoking has occurred. This has not been the case with teenage girls, who showed a continuous increase in proportional smoking. Both males and females Nigerians are initiating smoking at earlier ages, among adolescents, male consumption of cigarettes per day has plateaued during the past 5 years, but some increases are noted for females. A study showed that students between aged 16 years and above have 2.4 times higher risk of smoking, compared to aged 13 years [10]. Another study revealed that the students commenced smoking between 15 to 22 years, more than two thirds (71%) of smokers were in the age group less than 18 years [11].

Krosnick and Judd [12] stated that a common term in life-span developmental psychology of young adults is a decrease in parental influence on the child and an increase in peer influence. Peer smoking is an important factor that can influence smoking in young adults. A study by Krosnick and Judd [12] found that peer smoking correlates with adolescent cigarette smoking and usually accounts for more of the variance in adolescent smoking than any other variable. This is consistent with the study as 45.2% of the participants agreed that peer pressure was a factor that influences them to smoking also 16.1% and 9.7% specified boyfriend and girlfriend respectively while only 25.8% said it was their personal choice. Merdad, Al-Zahrani and Farsi [13] also documented that both parental and peer smoking factors were important predictors of smoking. In this study, the majority (63.6%) of the participants will smoke a cigarette offered by their best friend and 65.1% will probability smoke within the next 12 months.

Table 6. Participants' attitude towards smoking

S/N	Items	SA	%	Agree	%	SD	%	Disagree	%
1	Smokers are more popular.	45	40.2	15	13.4	25	22.3	25	22.3
2	Smoking helps people forget their worries.	40	35.7	15	13.4	25	22.3	30	26.8
3	Non-smokers dislike being around people who smoke.	31	27.7	29	25.9	20	17.9	30	26.8
4	Smokers find it hard to get dates.	15	13.4	25	22.3	50	44.6	20	17.9
5	Smoking is something you need to try before deciding to do it or not.	20	17.9	20	17.9	60	53.6	10	8.9
6	There is no harm in having a cigarette.	25	22.3	15	13.4	50	44.6	20	17.9
7	Smoking helps people relax.	10	8.9	20	17.9	50	44.6	30	26.8
8	Smoking makes people look sexy.	10	8.9	30	26.8	31	27.7	39	26.6
9	Smoking is enjoyable.	5	4.5	5	4.5	60	53.6	42	37.5
10	Smokers are often stressed.	55	49.1	35	31.3	10	8.9	12	10.7
11	Non-smokers should be proud to be smoke free.	70	62.5	13	11.6	17	15.1	12	10.7

Cigarette accessibility is the gateway for all risk factors that contribute to smoking in adolescents; the higher perceived accessibility increases the risk of smoking among adolescents. The study by Gilpin, Lee and Pearce [14] indicated that adolescents who perceived at baseline that cigarettes were easy to get were more likely to smoke. High prevalence of smoking among students may be relate to their accessibility to cigarettes, easy accessibility of cigarettes and tobacco products and lack of legislation prohibiting sale of tobacco to minors also increase the possibility of students to smoke [10]. In a study by Martini and Sulistyowati [15], on factors relating to cigarette smoking behaviour in Adison port, Saraburin Province in Indonesia, it was reported that the convenience for buying cigarette and getting cigarette from others were associated with smoking behaviour. Overall, accessibility to cigarettes is a very important factor related to smoking among college students, they are more likely to smoke with their friends. This is in consistence with this study as the majority (55.0%) of the participants gets their cigarette supply from friends while 35.0% indicated that they normally buy from the shops.

From the study it shows that majority of the participants have high knowledge that about the health effects of tobacco smoking. Almost all (99.1%) of the participants are aware that smoking is dangerous to their health and also aware of the health risks that are associated with cigarette smoking and 81.8% indicated lung cancer while the remaining 18.2% highlighted

cancer of the bladder. Also majority of them knew that lung cancer is associated with cigarette smoking, furthermore, majority of them agreed that cigarette smoking is implicated in heart disease. This showed that the adolescents were conversant with these health problems that result from smoking cigarettes [6]. Majority of the students had good knowledge of the various health problems associated with cigarette smoking. This is probably due to the fact that many of them have been educated in school about these harmful effects. There are other health effects of smoking among adolescents, these include coughing, respiratory infections, increase heart rate, high blood pressure, increase stomach acid, decrease blood and oxygen supply and low appetite. There are also cosmetic effects and premature ageing of skin, yellow-grey complexion, stains fingers and nails [16]. Smoking may lead to coughs and worsen respiratory diseases among young people. Adolescent smokers experience shortness of breath at higher rates compared to non-smoking adolescents and produce phlegm more often than those who do not smoke [17].

The majority (65.4%) of the participants in this study knew the benefit of smoking cessation. According to Fuller [18], there were some gender differences in knowledge and attitudes, with boys more likely to agree with the positive statements about smoking; that smoking helps people relax if they are stressed, that smoking is not dangerous if you do not smoke a lot and that smoking helps people cope with life. In the study,

8.9% of the participants strongly agreed that smoking helps in relaxation. Also there were also differences by age, with younger participants more likely to think that smoking is not dangerous if you do not smoke a lot while older participants were more likely to agree with the statements that smoking helps people to relax, that smokers stay slimmer than non-smokers, that smoking gives people confidence and that smoking helps people cope [18]. This may be a result of increasing personal experience with smoking and smokers were found to agree more with positive statements and less with negative statements than non-smokers [18]. Parrott [19] carried out a research on the topic that most smokers have stressful feeling more than non-smokers, and adolescent smokers believe that increasing levels of stress as they develop regular patterns of smoking. That means smoking can be caused as a result of stress that occurs in an individual. According to WHO, it can also result to social effects due to peer pressure and as a result it could lead to financial burdens for them and their families.

5. CONCLUSION

Smoking is one of most important health problems in the world. Smoking overuse results in serious consequences for the community health and the society as a whole. The major impacts on health are physically, psychologically, socially and economically due to smoking [20]. There is an increasing prevalence of cigarette smoking among adolescents. The result of the study revealed that some of the students have attempted to stop smoking but a tobacco treatment centre was not available within the institution, this should be addressed because it could assist in the reduction of smoking prevalence among adolescents and young adults. There is no safe level of exposure to second-hand tobacco smoke because it causes more than 600,000 deaths yearly. Every person should be able to breathe tobacco smoke-free air. Smoke-free laws protect the health of non-smokers, do not harm business and it encourages smokers to quit. Over 1.3 billion people or 18.0% of the world's population are protected by comprehensive national smoke free laws.

6. RECOMMENDATIONS FOR NURSING PRACTICE AND LIMITATION

From the findings of this study, it is recommended that a comprehensive individual

and group education should be done in the clinics and during school health visits, to increase adolescents' knowledge regarding the health effect of cigarette smoking. Also, emphasis should be placed on the consequences of smoking in the presence of children during adult health education.

In addition, nurses should create more awareness on cigarette smoking and this can be disseminated properly through seminars, conferences and workshops. They should also promote tobacco control activities like smoking cessation strategies, smoking cessation therapies and smoking prevention programs to students.

Besides, the government should provide facilities like a tobacco treatment centre in the communities and schools to aid in treatment of addictions and other illnesses. The government should also provide advocates to create health volunteers in the community by training them on how to motivate smokers to quit smoking, how to promote healthy lifestyles, and how to maintain smoke-free lifestyles.

It is also important for the government to have measures in protecting non-smokers from environmental tobacco smoke while training should be provided to all health-care providers at primary care, community and national level to enable them to effectively deliver smoking cessation interventions and treatment.

The limitation for the study was the purposive and convenient sample of health professional students in Afe Babalola University, Ado-Ekiti. Hence the results are not generalizable to a larger context.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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