

**Cigarette Smoking: Health Effects Awareness among Sandwich Undergraduates, University of Ilorin, Kwara State, Nigeria**

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**Abstract**

*Medical experts warns that if the current rate of tobacco use by young people continues, five million of today's children will die of smoking-related illnesses in their later years. This study aimed to assess the level of awareness of lung cancer, heart disease and ulcer disease as an effect of cigarette smoking among sandwich undergraduates, the University of Ilorin, Nigeria. The study used a descriptive cross-sectional survey which involved the use of a Multi-stage sampling procedure to select three hundred and eleven sandwich undergraduates across the nine*

departments of the Faculty of Education, University of Ilorin. The results revealed that 66.6% of the respondents had knowledge that lung cancer is an effect of cigarette smoking, while 33.4% do not know, 71.1% of the respondents had knowledge that heart disease is an effect of cigarette smoking while 28.9% do not know, 41.8% had the knowledge that ulcer disease is an effect of cigarette smoking while 58.2% of the respondents do not know that ulcer disease can be an effect of cigarette smoking. The research outcome indicated that there is a need to enlighten sandwich undergraduates on the health consequences of cigarette smoking to enable them to desist from the act.

**Keywords:** Cigarette-smoking, Health-effect, Awareness, Undergraduates.

### **Introduction**

Drug abuse refers to the habit of using the drug for another purpose that differs from what such drug is meant for and the act may affect both the physical, mental, social and emotional status of the users, their family and society at large (Afred, 2003). Today, a wide variety of drugs are commonly abused in Nigeria with its attendant consequences. It is established that drug abuse blocks meaningful use of time, energy and creative thinking. It destroys one's ambition to become great, thereby making such a person unproductive and a liability to the society. Youths in both rural and urban areas with different socio-economic background abuse both legal and illegal drugs. The drug available in tobacco leaves is nicotine which smokes like a cigarette. Tobacco is identified as a public health hazard to the world. Yet it is been abused by both young and old male and female in both urban and rural areas in Nigeria (Isiaka & Issah, 2015).

Isiaka and Issah (2015) pointed out that the use of different types of drugs by youths has become a common condition in our present societies. Most people recognise a close link between drugs and physical well-being. Some youths take energetic drugs to relieve themselves from pain without seeking help from the health officer.

Misuse of drugs among youths has become an extrinsic component of social reality. Drug abuse is a fact of daily life for most Nigerian youths in which taking drugs of various types has completely pervaded the behavioural patterns of the people.

Musa (1993) explained that one of the reasons that prompt youngsters to resort to drug abuse is that Nigeria is a drug-oriented society where youngsters observed their parents use drugs, they see an advertisement that glamorizes smoking, drinking and pill-taking and rather naturally, they are prone to participate in this adult-like behaviour.

Tobacco is a herb that can be smoked or chewed and it directly affect the brain. Nicotine is the primary active ingredient of tobacco. Tobacco smoke contains almost 400 other compounds and chemicals including gases, liquids, particles, tar, carbon monoxide, nitrogen dioxide, cardium, pyridine, ammonia, benzene phenol, acroetin, hydrogen cyanide, formal dehyde and hydrogen sulphide. Nicotine is the most addictive substance in tobacco and it is one of the most toxic of all poisonous. The thick, sticky dark fluid produced by the burning of tobacco is called "tar" which is made of several hundred different chemicals, many of them are poisonous. Ingesting tobacco may be less deadly than smoking cigarettes and pipes and chewing or sucking on smokeless tobacco, all these practices putting the user at risk of cancer of the lips, tongue, mouth and throat as well as other diseases and ailments. Smoking accounts for 30 per cent of all death from cancer. It is the cause of more than 80 per cent of all cases of lung cancer. The more people smoke, the longer they smoke and the earlier they start smoking, the more likely they develop lung cancer (Aina, Adegboro & Ayenigbarar, 2018).

Meg (2015) opined that cigarette smokers tend to die at an earlier age. They also tend to have a greater incidence of such diseases as cancer of the lungs, larynx, oral cavity, oesophagus and bladder, chronic bronchitis and emphysema, cardiovascular diseases including coronary heart disease and atherosclerosis and peptic ulcer than those who are not smokers. The greater the number of cigarettes smoked daily the higher the risk of death. Young men

who smokes heavily as much as 40 sticks or more per day, have on the average, eight years reduced life expectancy while it is about four years reduced life expectancy for young men who smoke less than 10 sticks per day.

Aina et. al, (2018, pointed out that tobacco has many harmful effects on the body. Tobacco smoke contains more than 4,000 chemicals which contains many harmful effects on the body. Many of the chemicals are toxic. Over 40 chemicals in tobacco smoke and an even greater number in smokeless tobacco have been identified by scientists as known carcinogens. Carcinogens are substances that cause cancer. Other effects of smoking tobacco include eye and nose irritation, cough, nausea, dizziness, increased heart rate, blood pressure and the amount of carbon dioxide in the body.

Fredrick, Olukunmi and Akintayo (2014) argued that cigarettes are common examples of drugs that are easily available to young people. They are classified as drugs because they contain nicotine and they have physical and psychological effects on the body. It causes stimulation of the heart and narrowing of blood vessels which can lead to hypertension. It can lead to headache, loss of appetite, nausea and delayed growth of the fetus. It also aggravates or causes sinusitis, strokes, heart attack and lung cancer.

The tobacco companies address young people directly because they must attract children and young teenagers to replace more than two million adult smokers who die each year worldwide from lung cancer and other smoking-related illnesses. The industry knows that a person who doesn't become a smoker during the teen years is most unlikely to take up the habit later on. Eighty-two per cent of adults with a history of smoking took their first cigarette before age 18. About one in every first high school seniors' smokes regularly. More than 3,000 teenagers become regular smokers each day. The medical experts warns that if the current rate of tobacco use by young people continues, five million of today's children will die of smoking-related illnesses in their later years (Frances, Eleanor & Linda, 1999).

Nicotine has many effects on the body. It affects the body's major organ systems: the nervous and hormonal systems, the cardiovascular system and the digestive system. It triggers the release of stress hormones, so it speeds up the heart rate and raises blood pressure. It changes the brainwave pattern. It calms the nerves, but some people may feel stimulated, it reduces anxiety, reduces feelings of pain, helps the person concentrate, it reduces hunger. The pleasant feelings of nicotine are followed by unpleasant ones as the dose wears off. The unpleasant effects of withdrawal as the dose wears off makes the smokers crave for another dose. Tobacco cigarette contains more than 4,000 hazardous compounds which makes their way into the lungs of smokers and the air that everyone breathes. Tar is the most harmful substance in cigarette similar to the tars used on roads construction. It contains carcinogens responsible for cases of lung cancer and many cancers of other organs. Tars also cause "emphysema" disease which is another major disease of the lungs. When people smoke, they inhale many harmful compounds. Naturally, the organ most affected by smoke is the lungs (Frances, Eleanor & Linda, 1999).

Aristidis, Roupa and Konstaninos (2011), opined that smoking is a significant cause of deaths that could be prevented. Active and passive smoking both contribute to the development of chronic diseases and increases mortality. The early initiation of smoking habits and constant exposure to tobacco products increase the relative risk factor in the occurrence of serious acute or chronic health disorders. In addition to the negative health effects, smoking has a discernible economic impact on the smokers themselves and the health system of the country and detrimental effects on the social aspects of the population.

Ene (2004), opined that tobacco advertising prompted millions of teenagers and children to start smoking. Overwhelmingly, adults who smoke started before age 18. People begin using tobacco for a variety of reasons which including the influence of advertisements, peer pressure or boredom and addiction. People who continue to

use tobacco do so because they are addicted to the drug nicotine. Smoking causes enormous losses.

Despite the awareness and health risks associated with cigarette smoking, some adolescents, undergraduates and adults in the study area take cigarettes with the aim of feeling high and meeting up with the requirement of their peers without considering the consequences of their practice to their health, education and society at large. Smoking was becoming a major health problem in Nigeria and despite repeated government warnings, many Nigerians still smoke. It then follows that many deaths in Nigeria could be attributed to smoking (Jude & Chuks, 2017).

### **Statement of the Problem**

Smokers are not as healthy as nonsmokers. Smoking damages the body system which protects a person from the disease. It also triggers allergies and may lead to inflammation and swelling of the sinuses. Smokers suffer from the common cold more often than nonsmokers. Smokers are also more likely to get infectious lung diseases such as influenza and pneumonia. Smoking cigarettes can also lead to health problems such as teeth and gum disease, tooth loss; delayed healing after dental surgery, chronic bad breath and it also contains the grit which wears away the surface of the teeth. Smokers tend to look frail and perform both academic and physical work more slowly than nonsmokers, smoking also leads to discolouration of the teeth due to nicotine and most especially tar deposit, black lips, foul body odour, bad breath, hoarse voice, eyes and nose irritation, the former of which may result in conjunctivitis. Smoking impairs the skin function resulting in reduced blood in circulation and therefore impairment of oxygen supply to the skin surface which makes the skin wrinkle and to age prematurity. The researcher observed that some sandwich undergraduates of the University of Ilorin do not know the effects of cigarette smoking on health. Adequate attention was yet to be given on the need to educate the students and society at large on the benefits of keeping away from cigarette smokings which contribute negatively to the

health of people. Therefore, the researchers investigated on the awareness of health effects of cigarette smoking among sandwich undergraduate students of the University of Ilorin.

In Nigeria, the rate of people engaged in cigarette smoking continues to increase every day and this prompted the researcher to examine the awareness level of people on health effects of cigarette smoking. The study aims to investigate the level of awareness of lung cancer, heart disease and ulcer disease as an effect of cigarette smoking among sandwich undergraduates in the University of Ilorin, Nigeria.

### **Methodology**

The descriptive research design of the survey method was used for the study. The study population is made up of all the sandwich undergraduates of the Faculty of Education, University of Ilorin, Nigeria. The targeted population comprises of all the three thousand and eighty-two (3,082) students which includes both male and female sandwich undergraduates from six (6) selected departments out of nine departments in the study area.

The multi-stage sampling technique which is made up of simple, proportionate and convenience sampling techniques were used for the study to select 311 sandwich undergraduates from the students' population. Six departments were selected for the study.

**At stage one**, simple random sampling technique was used to choose six (6) departments from the nine (9) departments in the study area using simple balloting technique; those selected departments were as follows: Department of Social Science Education, Department of Science Education, Department of Counsellor Education, Department of Health Promotion and Environmental Health Education, Department of Human Kinetics Education and Department of Art Education. **At stage two**, the proportionate sampling procedure was used to pick ten percent (10%) of the population from the six (6) selected departments based on their populations. **At stage three**, the convenience sampling approach was used to choose the respondents who

participated in the study based on the 10% population of the selected departments. The researchers administered the questionnaire to the respondents at the venue used for each of selected departmental lectures. The number of undergraduates who participated in the study from the selected department were as follows; Social Science 61, Science Education 71, Counsellor education 44, Health Promotion and Environmental Health Education 40, Human kinetics Education 16 and Art Education 79. A total of three hundred and eleven (311) sandwich undergraduates participated in the study.

**Table I:** Calculation of Sample Chosen

S/N	Departments	No of Students from the selected Department	Number of Respondents selected based on (10%)
1.	Social Science Education	610	61
2.	Science Education	711	71
3.	Counsellor Education	435	44
4.	Health Promotion and Env. Health Education	404	40
5.	Human Kinetics Education	135	16
6.	Art Education	787	79
<b>Total</b>		<b>3082</b>	<b>311</b>

**Source:** Researchers' developed

The instrument used for the study was a researchers' developed questionnaire that was validated by the three experts in related fields. The consistent of the instrument was established using a test re-test method, 20 copies of the questionnaire administered on twenty (20) sandwich undergraduates from the department of educational management which was not part of the study. Two weeks after, the instrument re-administered. The results were



compared using the Pearson Product Moment Correlation. A reliability coefficient of 0.84r was obtained which was considered high enough and this made the research instrument reliable. The researcher administered the instrument with the help of three trained research assistants. Frequency counts and percentages were used to analyse the data collected.

### Results and Discussion of Findings

The outcome of the findings obtained from the study were shown on the Table below:

**Research Question One:** What is the level of knowledge of lung cancer disease as effects of cigarette smoking possessed by sandwich undergraduates, University of Ilorin?

**Table 2:** Awareness of Lung Cancer as an Effect of Cigarette Smoking

S/N	Items	Agreed	Disagreed
1.	Cigarette smoking is the major cause of chronic lung cancer	218(70.1%)	93(29.9%)
2.	Tobacco smoking irritates the mucus lining of the upper respiratory tract and hampered the bronchi and bronchioles	197(63.3%)	114(36.7%)
3.	Tobacco smokers are prone to the risk of oral cancer	203(65.3%)	108(34.7%)
4.	Tobacco smoking increases the risk of the stomach, oesophagus, pancreas, kidney and bladder cancer	210(67.5%)	101(32.5%)
<b>Total</b>		<b>207 (66.6%)</b>	<b>104 (33.4%)</b>

Based on Table 2, it can be concluded that 66.6% of the respondents agreed that cigarette smoking is an effect of lung cancer disease, while 33.4% disagreed. So, from the results obtained from the research conducted, it can also be determined that sandwich undergraduates of the University of Ilorin have knowledge that cigarette smoking result to problem of lung cancer disease.

**Research Question Two:** What is the level of knowledge of heart disease as effects of cigarette smoking possessed by sandwich undergraduates, University of Ilorin?

**Table 3:** Awareness of Heart Disease as an Effect of Cigarette Smoking

S/N/Items	Agreed	Disagreed
1. Smoking tobacco damaged the walls of arteries which lead to heart attack	250(80.4%)	61(19.6%)
2. Accumulation of carbon monoxide in the blood due to cigarette smoking leads to the risk of heart and circulatory diseases	200(64%)	113(36%)
3. Tobacco smoking increases the risk of stroke	220(70.7%)	91(29.3%)
4. Smoking cigarette make it harder for smokers' blood to carry enough oxygen need by body	215(69.1%)	96(30.9%)
<b>Total</b>	<b>221 (71.1%)</b>	<b>90 (28.9%)</b>

Based on Table 3, it can be concluded that 71.1% of the respondents agreed that cigarette smoking is an effect of heart disease, while 28.9% disagreed. So, from the results realized from the research conducted, it can be established that sandwich undergraduates students of the University of Ilorin have knowledge that cigarette smoking result to the problem of heart disease.

**Table 4:** Awareness of Ulcer Disease as an Effect of Cigarette Smoking

S/N	Items	Agreed	Disagreed
1.	Tobacco smoking increases the pain experienced by smokers due to peptic ulcer	141(45.3.7%)	170(54.7%)
2.	Tobacco cigarette reduces the effectiveness of ulcer treatment	120(38.6%)	191(61.4%)
3.	Tobacco smoking reduces the space of healing of ulcer case	115(37%)	196(63%)
4.	Tobacco smoking increases the rate of death from peptic ulcer	143(46%)	168(54%)
<b>Total</b>		<b>130 (41.8%)</b>	<b>181 (58.2%)</b>

Base on Table 4, it can be concluded that 41.8% of the respondents agreed that cigarette smoking is an effect of ulcer disease, while 58.2% of the respondents disagreed. So from the results generated from the research conducted, it can be inferred that sandwich undergraduates of the University of Ilorin do not have knowledge that cigarette smoking result to problem of ulcer disease.

### Discussion of Findings

#### Awareness of lung cancer as an effect of cigarette smoking

Based on the findings from the study conducted by the researcher among sandwich undergraduates in the University of Ilorin where 66.6% of the respondents have knowledge that cigarette smoking lead to lung cancer disease. The outcome of the investigation supports the view of Aina et. al, (2018), which pointed out that ingesting tobacco may be less deadly than smoking cigarettes, pipe and chewing or sucking on smokeless tobacco, all put the user at risk of cancer of lips, tongue, mouth and throat as well as other diseases and ailments. Smoking accounts for 30 percent of all death from cancer. It is the cause of more than 80 percent of all cases of lung cancer. The more people smoke, the longer they smoke and

the earlier they start smoking, the more likely they develop lung cancer. Also, the result of the finding agrees with the assertion of Frances et. al, (1999) who stated that cigarette smoking damages the lungs tissue in many ways. The tars in cigarette smoke makes the coat of mucus abnormally thick. It also slows the action of the cilia in sweeping out the mucus, irritate builds, making the smoker feel like coughing. However, each puff on a cigarette paralyses the cilia and numbs the throat. Cancer of the lung is much more common in smokers than in nonsmokers. The carcinogen in cigarette smoke causes cancer not only in the lungs, but also in the nose, lips, mouth, tongue, throat and oesophagus. Some of the carcinogenic get into the bloodstream and travel freely, so they can cause cancer in any other organ as well. Smokers have higher rates of 7 to 15 times to develop lung cancer than nonsmokers.

#### **Awareness of heart disease as an effect of cigarette smoking**

Based on the results obtained from the study conducted by the researcher among sandwich undergraduates in the University of Ilorin where 71.1% of the respondents have knowledge that cigarette smoking lead to heart disease. The results of the finding corroborate with the assertion of Cardio Smart (2017), who stated that smoking cigarette affects the blood vessels and heart remain one of the most preventable causes of heart disease. Cigarette smoking will make arteries tighten and this makes the heart work harder. Smoking can also increase an irregular heart rhythm and this raises blood pressure which is the leading cause of stroke. Cigarette smoking is associated with thickening of the heart and lowers the heart's pumping ability which is responsible for heart failure. The more and longer the people without heart disease smoked, the greater the damage to their hearts' structure and function.

#### **Awareness of ulcer disease as an effect of cigarette smoking**

Based on the outcomes from the study conducted by the researchers among sandwich undergraduates in the University of Ilorin where 58.2% of the respondents do not have knowledge that cigarette smoking leads to ulcer disease. The results of the

investigation disagree with the assertion of Meg (2015) who stated that cigarette smoking appears to be connected to increase illness and a higher death rate from peptic ulcers. Tobacco smoking reduces the effectiveness of standard ulcer treatment by slowing the rate of ulcer healing.

### **Conclusion**

Based on the results of the research and discussion that had been described previously, it can be concluded that the sandwich undergraduates in University of Ilorin have knowledge that cigarette smoking result to lung cancer and heart disease with the results realized from the questionnaire percentage of 66.6% and 71.1% respectively, while the sandwich undergraduates do not have knowledge that cigarette smoking leads to ulcer disease with results of 58.2%.

### **Recommendations**

The university authority should organize a sensitization programme for students in the school campus on health risks of cigarette smoking on physical and psychological well-being to protect them against diseases associated with tobacco smoking such as lung cancer, heart disease and ulcer disease. The ministry of education should enlighten the students and the society at large on the need for them to keep away from cigarette smoking to protect their health against preventable respiratory diseases which affecting tobacco smokers. The ministry of health should carry out an enlightenment campaign through mass media that will educate students, youths and community members on the danger involved in tobacco smoking to their health which is one of the factors which contribute to premature death.

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### **Conflict of Interest**

No conflicts of interest to declare.

## References

- Aina, S.I. Adegboro, J.S. & Ayenigbarar, C.O. (2018). Drugs, Substance Use and Abuse. Benni city: Ambik Press. Pp. 141-142.
- Alfred, A.A. (2003). Adolescents in Africa. Ibadan: Hadassah publishing limited. Pp.10.
- Aristidis, V., Roupa, Z. & Konstantinos, G. (2011). The Influence of advertising Messages on the Smoking Habits of Teenagers. *Pneumon*, 2 (24), pp. 188-193.
- Cardio Smart. (2017). Smoking and Heart Disease. (Online). <https://www.cardiosmart.org/Healthy-Living/Stop-Smoking/Smoking-and-HeartDisease#:~:text=But%20smoking%20cigarettes%20al so%20affects,are%20leading%20causes%20of%20stroke.> Access 20<sup>th</sup> January 2020.
- Ene, O.C. (2004). Health Wellness and Longevity. Enugu: Cheston Agency. Pp. 10.
- Frances, S.W., Eleanor, N.W. & Linda, K.D. (1999). Health Making Life Choices. New York: West Educational Publishing. Pp. 372-376.
- Fredrick, O.S., Olukunmi, L.O., & Akintayo, O.O. (2014). Emerging and Re-emerging Issues in Health Promotion for healthy Living. Ibadan: Isru Educational Services. pp. 61-63.
- Isiaka, M. & Issah, M. (2015). Incidence of Drug Abuse and Violence among the Youths in Ilorin Metropolis. *Journal of Intellectual Scientific and Cultural Interest*, 18 (1), pp. 1-5.
- Jude, E. & Chuks, E.E. (2017). Substance Use Risk Behaviours of Secondary School Teachers in Enugu Education Zone, Enugu State, Nigeria. *Journal of Human Kinetics and Sports Science, University of Benin, Benin City, Nigeria*, 5 (3), pp. 10-18.
- Meg, A.E. (2015). Drug, Alcohol and Tobacco Education. Owerri: Hephzihab. Pp. 131-133.
- Musa, Y.Q. (1993). Issues in Drug Use and Abuse. London: Tavistoch publication. Pp. 10.