

The Effect of Tobacco Smoking on the Health and Academic Achievement among Secondary School Male Students in Njikoka Municipal

by

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Abstract

This study sought to investigate the effect of tobacco smoking on the health and academic achievement among secondary school male students in Njikoka Municipal. The study was guided by four research questions and it adopted a descriptive survey research design. The sample involved 36 male teachers selected through purposive sample technique and 364 male students selected through simple random sampling techniques from the population of 1879 (male teachers and students) from government owned senior secondary schools in Njikoka Municipal, Anambra State. A 50-item questionnaire developed by the researcher and validated by experts was used to collect data for the study and reliability index of 0.82 was realized using Pearson product movement correlation coefficient. Data obtained were analyzed and reported using mean and standard deviation. The findings indicated among others that tobacco smoking has a lot of health consequences to the smokers ranging from cardiovascular, oral cancers, bladder cancer, chronic obstructive pulmonary disease (COPD) and others. Furthermore, its effect to student's academic achievement is not limited to memory deficit. Therefore, it was concluded that tobacco smoking endangered the health of secondary school male student that indulged in it. Also, tobacco use effects school performance negatively. Certainly, if the observed consequences are not checkmate promptly, then the future life wire of the society is in danger with its consequences. Thus, Tobacco use kills about one-half of all lifetime users. Based on the findings, government at all levels should treat tobacco use among secondary school male students as a priority issue. Social environment of the secondary school male student should be monitored by parents and responsible authorities. It is also necessary for the government and academic institution to adopt a comprehensive smoking-control interventions and health education among this target group. Academic institution is encouraged to provide smoke-free college residences. With this stemming out tobacco smoking among the youth is guaranty in the contemporary society.

Keywords: Tobacco, smoking, health, academic, achievement.

Introduction

Tobacco smoking is one of the most common forms of recreational substance use. It is a prevalent habit among humans all over the world especially youths and male student in particular. China, India, and Indonesia are the three leading countries which account for 50.0% of the world's male smokers, while USA, China and India, account for 27.0% of the world's female smoker (Noise Break, 2018). In private places as well as in social gatherings, it is common to find smokers among the population; this makes tobacco the most common substance that is smoked worldwide (Proctar, 2008). Globally, over 1.1 billion people smoked tobacco (WHO, 2017).

Despite its high rate of consumption globally, it has high rate of disease causes and death consequences. Tobacco is the most important preventable cause of premature death in many countries, and half of persistent smokers who start smoking in adolescence will die from the use of tobacco (Adekunle, Omotosho, Tanimola, and Oladimeji, 2011).

According to data from the World Health Organization (1998), about 4.9 million people a year around the world, die due to tobacco consumption. If this consumption is not reduced, the WHO estimates that, in 2020/2030, this figure will reach 10 million people a year, as reported by the Health Ministry in 2005. Tobacco use is the leading single cause of disease (12.2%) and is the leading cause of morbidity and mortality. Smoking is a preventable risk factors of many chronic diseases whose prevalence worldwide is of the increase and calls for great concern (WHO, 2008).

Development of many chronic diseases such as cardiovascular, cancer, asthma, chronic obstructive pulmonary disease (COPD) and even decrease fertility has been linked to smoking (CDC, 2016). Smoking has also been linked to reduced taste perception,

staining of teeth, palatal keratosis, melanosis, oral candidiasis, oral cancers, halitosis and dental caries (Bramoh and Umanah, 2014).

According to the American Cancer Society (2007) and United States (US) Surgeon General (2005), its intake also causes fatal diseases such as chronic obstructive lung disease (emphysema and chronic bronchitis), lung cancer, ischemic heart disease, bladder cancer, upper respiratory tract cancers and pancreatic cancer. Tobacco use kills about one-half of all lifetime users. The International Union against Tuberculosis and lung disease (2008), reported 70 million deaths because of tobacco between 1950 and 2000.

Koushki and Bustan (2006), documented that there are increasing numbers of youths starting to smoke at an earlier age which is a major concern to public health. According to WHO (2007), about one million deaths reported in the year 2000 were attributed to cigarette smoking worldwide with most increase recorded in low-and- medium income countries, where more than 80% of the global tobacco users lives (WHO, 2011). By 2030, if current trends continue, smoking will kill one in six people (WHO, 2008). The trend, especially in developing counties liken Nigeria, will continue to increase if anti-tobacco programs are not enforced.

More so, among the researchers who conducted studies on the influence of the practice of healthy lifestyles and academic performance and in relation to tobacco (Precioso *et al.*, 2012; Chiasson and Aubé, 2008) report results showed relationship between smoking and academic success for both men and women. The use of tobacco products was associated with lower academic performance (Emília *et al.*, 2016). The brain area responsible for executive functions and attention performance. Adolescent smokers suffer from attention deficits, which aggravate

with the years of smoking. Many physical changes occur in the brain and body as a result of tobacco abuse. These physical changes can make learning and concentration more difficult and can negatively affect school performance (Goriounova and Mansvelde, 2012).

The contributing factors to tobacco smoking among student could be but not limited to socialization, fashionable, curiosity, loneliness and boredom. Factors that influence smoking among teenagers include personal choice peer pressure/influence, family/friend influence among others (Fida and Abdelmoneim, 2013; Sorgawal *et al.*, 2014). In India, increased tobacco use was found to be associated with older age groups, male gender, government-run schools and having parents or friends who smoke (Sen *et al.*, 2000). This rise, to a large extent is due to inadequate or lack of awareness and knowledge concerning the long-term effect of smoking (Shomar *et al.*, 2014).

Fortunately, the prevalence is declining in many countries but smoking appears to be increasing in the African region (WHO, 2017). In Nigeria, the Nigeria government has place ban on the misuse of tobacco and public sales of the substance, using Drug Enforcement Agencies like the National Drug Law Enforcement Agency (NDLEA), police force and others. Notwithstanding the efforts to control tobacco smoking among youths especially secondary school male students, the smoking and misuse of tobacco substances is still on the increase with its consequences. It is against this background that this study seeks to investigate the effect of tobacco smoking among secondary school male students in Njikoka Municipal of Anambra State. Hence the prevalence of smoking among teenagers in secondary schools in developing countries such as Sudan was reported to be 13.6% (Gadalla *et al.*, 2012).

In view of the above, the aim of this study is to examine the effect of tobacco smoking on the health and academic achievement among secondary school male students in Njikoka Municipal. This study therefore specifically sought to:

1. Determine various possible health effect of tobacco smoking among secondary school male students.
2. Ascertain some effects of tobacco smoking on the academic achievement among secondary school male students.
3. Determine some possible contributing factors that encourage tobacco smoking among secondary school male students.
4. Determine some possible ways to discourage tobacco smoking among secondary school male students.

In other to achieve the specific objective of this study, the following research questions guided the study:

1. What are the various possible health effect of tobacco smoking among secondary school male students?
2. What are some of the academic achievement effects of tobacco smoking among secondary school male students?
3. What are some of the possible contributing factors that encourage tobacco smoking among secondary school male students?
4. What are some of the possible ways to discourage tobacco smoking among secondary school male students?

Method

This study adopted descriptive survey research design to ascertain the effect of tobacco smoking on the health and academic achievement among secondary school male students. The design has advantage of producing good amount of responses from a wide range of people. Another reason why descriptive research design was used is that it has the potential to provide a lot more

information from large sample of individuals. The population of this study comprised 1879 (male teacher and male student) from the government owned senior secondary schools in Njikoka Municipal, Anambra State. Sample size of 400 (male teacher and male student) was established using Yan (1957), method. Sample consisting of 36 male teachers were selected through purposive sample techniques and 364 male students were also randomly selected among the targeted group using simple random sampling techniques drawn from the government owned senior secondary schools in the education zone. Data were collected using a structured questionnaire developed by the researcher. The instruments were validated by experts of biochemistry and experts in the Department of Measurement and Evaluation for face and content validation.

Following their recommendations, the final draft of the instrument was produced. The reliability of the instrument was established as 0.82 using the Person's Product Moment Correlation Coefficient. The instruments were administered to the 400 respondents using a face to face method. The numbers of item question raised were 50. The item questions raised were acquired from the literature review and also in line with the research questions. The Likert rating scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) were used. The scale is weighted 4, 3, 2, and 1 respectively. For decision on the result in table any mean less than 3.00 are taken as rejected while the rest are as accepted. The data collected was analyzed using mean and standard deviation.

Results

Research Question One: What are the various possible health consequence of tobacco smoking among secondary school male students?

Table 1: Mean and Standard Deviation on the Various Possible Health Consequence of Tobacco Smoking among Secondary School Male Students?

S/No:	Questionnaires items	N	\bar{X}	STD	Decision
1	It could cause coronary artery disease	400	3.38	0.88	Accepted
2	It has the tendency of causing lungs cancer	400	3.39	0.89	Accepted
3	It could cause bladder cancer	400	3.42	0.92	Accepted
4	It has ability of causing pulmonary emphysema	400	3.39	0.88	Accepted
5	It could cause peripheral vascular disease	400	3.41	0.91	Accepted
6	It has the ability of causing neonatal mortality	400	3.45	0.94	Accepted
7	It has the tendency of causing asthma	400	3.42	0.91	Accepted
8	It has could cause ischemic heart disease	400	3.39	0.89	Accepted
9	It has the tendency of causing headaches	400	3.42	0.91	Accepted
10	It has the ability of causing reduction in physical function	400	3.45	0.93	Accepted
11	It could cause oral cancer	400	3.39	0.90	Accepted
12	Staining of teeth	400	3.43	0.92	Accepted
13	Palatal keratosis development	400	3.40	0.91	Accepted
14	Oral candidiasis development	4000	3.40	0.91	Accepted
15	It has ability of causing early death	400	3.43	0.93	Accepted

Table 1 shows that items number 1 to 15 were all accepted. This revealed that tobacco smoking has a lot of health effect among secondary school male students and thus, making the effected student prone to early death as depicted by the result. Therefore, teachers, parents and government authorities at

all tiers need to guide the students promptly to the right life style in order to harness their potentials in right direction for national economic growth. Effective teaching of the tobacco smoking health consequences by the teachers should be ensured in all institution and secondary in particular.

Research Question Two: What are some of the effects of tobacco smoking on the academic achievement among secondary school male students?

Table 2: Mean and standard deviation on some of the effects of tobacco smoking on the academic achievement among secondary school male students

S/No:	Questionnaires items	N	\bar{x}	STD	Decision
16	It could cause attention deficit to school activity	400	3.42	0.91	Accepted
17	It has the tendency of memory function	400	3.38	0.89	Accepted
18	It has the ability of decreasing cognitive function	400	3.41	0.91	Accepted
19	Development of poor self-image on learning activity	400	3.40	0.90	Accepted
20	Being rebellion to learning activity could be possible	400	3.37	0.87	Accepted
21	Examination phobia could be develop	400	3.31	0.83	Accepted

Table 2 shows that items number 16 to 21 were all accepted. This shown that tobacco smoking has some negative impact on the academic achievement among secondary school male students to an extent. This is due to some issues ranging from decrease on memory function, attention deficit and others as indicated by the

result. Effective monitoring of secondary school male student on their academic performance should be encourage by all and sundry to ensure quick respond on their academic improvement when poor performance is observed. Tobacco use effect learners negatively.

Research Question Three: What are some of the possible contributing factors that encourage tobacco smoking among secondary school male students?

Table 3: Mean and standard deviation on the some of the possible contributing factors that encourage tobacco smoking among secondary school male students.

S/No:	Questionnaires Items	N	\bar{x}	STD	Decision
22	Effective advertising, promotion, and marketing of the tobacco company	400	3.41	0.92	Accepted
23	Availability of different types of tobacco products	400	3.32	0.85	Accepted
24	Ineffective tobacco control policies and strategies	400	3.38	0.90	Accepted
25	Tobacco industry behavior to promote tobacco use	400	3.41	0.91	Accepted
26	Cultural and religious norms	400	3.40	0.91	Accepted

27	Believing that smoking can takeout psychological stress	400	3.38	0.89	Accepted
28	Smoking is a tool for socialization	400	3.40	0.91	Accepted
29	Smoking helps in concentration of study work	400	3.42	0.91	Accepted
30	Feelings such as frustration, anger, and stress trigger us to smoke	400	3.36	0.88	Accepted
31	Believing that smoking can ease communication	400	3.39	0.90	Accepted
32	Loneliness and boredom	400	3.40	0.89	Accepted
33	Fashionable	400	3.40	0.91	Accepted
34	Smokers in the family (father/brother)	400	3.40	0.91	Accepted
35	Believing that smoking gives a psychological pleasure	400	3.39	0.90	Accepted
	Curiosity tendency	400	3.40	0.91	Accepted
37	For outlook and personality	400	3.37	0.88	Accepted
38	Friends/peer groups	400	3.41	0.91	Accepted
39	Mechanism to compensate social security	400	3.39	0.90	Accepted
40	Taking it to look like adult	400	3.41	0.91	Accepted

Table 3 shows that items number 22 to 40 were all accepted. This revealed that despite various health and academic consequences of tobacco smoking some secondary school male students still enjoy smoking. Certainly, some factors that contributed to their behavior include curiosity tendency, effective advertising,

promotion, marketing of the tobacco company, availability of different types of tobacco products, believing that smoking takeout psychological stress and others as depicted by the result. These contributing factors would certainly continue to destroy the future of some youths if not dealt with quickly.

Research Question Four: What are some of the possible solution on the issues of tobacco smoking among secondary school male students.

Table 4: Mean and standard deviation on the possible solution on the issues of tobacco smoking among secondary school male students

S/No:	Questionnaires items	N	\bar{x}	STD	Decision
41	Great awareness on the tobacco smoking consequence	400	3.35	0.90	Accepted
42	Counselling seminars, conferences about tobacco smoking consequences	400	3.36	0.88	Accepted

43	Making academic institution free-smoke college Residence	400	3.37	0.87	Accepted
44	Government having youths oriented programmes	400	3.39	0.90	Accepted
45	All schools should develop and enforce a school policy on tobacco use.	400	3.39	0.90	Accepted
46	Having functional laws that regulate tobacco usage	400	3.41	0.91	Accepted
47	Students should be informed about the very high addictive power of cigarettes	400	3.36	0.88	Accepted
48	Establishment of treat that forbids tobacco advert	400	3.35	0.88	Accepted
49	Effective mass media against the tobacco smoking	400	3.39	0.90	Accepted
50	Schools should provide behavioural skills for resisting social influences that promote tobacco use.	400	3.39	0.90	Accepted

Table 4 shows that items 41 to 50 were all accepted. This revealed that tobacco smoking among secondary school male students can still be put under control by using proactive measures. These possible strategies include but not limited to counselling seminars, conferences about the tobacco smoking consequences, making academic institution free-smoke college residence and government having youths oriented programmes and policies that is educational and economically viable as indicated by the result. It is important to intervene male secondary school students at an earlier age before they begin smoking. Only this would make tobacco smoking be a history in the contemporary society.

Discussion of the Findings

The health and academic consequences of tobacco smoking among secondary school male students as observed in the study are in line with the widely-established fact and thus, calls for proactive measure to curtail its menace in all institution and secondary school educational level in particular. This assertion was confirmed with the result in Table 1 of this study which revealed that tobacco smoking among secondary school male students has a lot of health effect on the user and thus, making the affected student prone to diseases such as chronic obstructive lung disease (emphysema

and chronic bronchitis), lung cancer, ischemic heart disease, bladder cancer, upper respiratory tract cancers and pancreatic cancer as depicted by the result. This is in line with (CDC, 2016), the center observed that development of many chronic diseases such as cardiovascular, cancer, asthma, chronic obstructive pulmonary disease (COPD) and even decrease fertility has been linked to smoking. Smoking has also been linked to reduced taste perception, staining of teeth, palatal keratosis, melanosis, oral candidiasis, oral cancers, halitosis and dental caries (Braumoh and Umanah, 2014).

The findings of Research Question 2 revealed that tobacco smoking among secondary school male students has some negative impact on their academic achievement to an extent. This could be due to some issues ranging from decrease on memory function, attention deficit and others as indicated by the result. This is in line with (Precioso *et al.*, 2012; Chiasson and Aubé, 2008; Emília *et al.*, 2016) they observed that the use of tobacco products was associated with lower academic performance.

More so, in Table 3 the findings indicated that despite various health and academic consequences of tobacco smoking some secondary school male students still enjoy

smoking. This could be as a result of some factors such as curiosity tendency, family influence, effective advertising, promotion, marketing of the tobacco company, availability of different types of tobacco products, believing that smoking takeout psychological stress and others as depicted by the result. This is line with (Fida and Abdelmoneim, 2013; Sorgawal *et al.*, 2014) they observed that factors that influence smoking among teenagers include personal choice peer pressure/influence, family/friend influence among others

Again, in the Table 4, the findings revealed that academic institution should ensure free-smoke college residence and that government should have youths oriented programmes and policies that is educational and economically viable as indicated by the result. This is in line with Waqar et al. (2010), they observed that it is necessary for the government and academic institution to adopt a comprehensive smoking-control interventions and health education among this target group.

Conclusion

The study shows that tobacco smoking has a lot of health consequences among secondary school male students ranging from cardiovascular, oral cancers, bladder cancer, chronic obstructive pulmonary disease (COPD) and others. More so, low academic achievers may be more vulnerable to smoking but it is not the dominant factor affecting academic achievements. Hence the performance was associated with smoking. Also, the reasons why male secondary school student's smoke was found to be multifactorial and the combined impact of all was creating high chances of smoking among them. Peer influence and curiosity about smoking were among the main reasons for smoking followed by students considering smoking as fashionable. Again, all schools should develop and enforce a school policy on tobacco use. Policies should prohibit tobacco use by all

students, and visitors during school-related activity. With this stemming out tobacco smoking among the youth is guaranty in the contemporary society.

Recommendations

The following recommendations were made;

1. Academic institution is encouraged to provide smoke-free college residences. All schools should provide tobacco prevention education in kindergarten through secondary school. The instruction should be especially intensive in junior and senior secondary school and reinforced in high institution.
2. Schools should provide instructions about immediate and long-term consequences of tobacco use and the reasons why adolescents say they smoke, and about social influences that promote tobacco use.
3. Social environment of the youth should be monitored by parents and responsible authorities.
4. It alerts me to the need for intervention in a school context to sensitize vulnerable groups, involve the family, promote cessation of tobacco consumption with a view to educational success.
5. The government should treat tobacco use among youths especially male secondary school student's as a priority health issue.

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