Gender and Ethnic Differences in Attitudes towards the Use of Alcohol and Smoking of Cigarettes on University Campuses in Nigeria

Dr. Agwu Michael Ezenna
Managing Director, Department of Public Health, Mother Teresa Public Health Research Center, Aba, Abia State, Nigeria

Abstract:
Background: Previous studies have investigated student's health status and lifestyles behaviours but none have looked into students' attitudes towards positive lifestyles that can enhance good health. This study is the first study in Nigeria that gauged student's attitudes towards the use of alcohol and cigarettes on campuses, by gender and ethnicity.

Objectives: This study intends to understand students' attitudes towards banning of smoking and alcohols on campus in Nigerian universities and how this transmits through gender and ethnicity.

Method: The study was cross sectional. Full time university students were recruited from six universities within three ethnic groups in Nigeria for the study. Data collection was based on an anonymous questionnaire and the sample size was (n=1549). Descriptive tests, chi-square tests and analysis of variance (ANOVA) tests were conducted.

Results: With regards to 'no smoking on campus' 67% of the total sample strongly agrees while 10% of the total sample strongly disagrees. By gender more female students than male strongly agree that there should be no smoking on campus. With regards to ethnicity the study indicated that more Hausa students strongly agree that there should be no smoking on campus while more Igbo students strongly disagree that there should be no smoking on campus. With regards to 'no alcohol on campus' 54% strongly agree only 6% strongly disagree. With regards to gender, more female students than male strongly agree that there should be no alcohol on campus. On the other hand, ethnic differences indicated that more Hausa students strongly agree to the ban of alcohol on campus.

Conclusion: The findings indicated that gender ethnicity influences students' lifestyle behaviours and attitudes towards positive healthy lifestyles. Consequently, the result showed that public health intervention for positive lifestyles behaviour in Nigeria should be target towards ethnicity, and gender.

Keywords: Gender, ethnicity, age, religion. Income, students, socio-demographic, social support

1. Introduction

There is evidence that the onset of certain health conditions such as depression, stress, obesity and hypertension are lifestyles dependent, and can be prevented by certain lifestyle behaviours, such moderate alcohol consumption and smoking (Al-Naggar et al., 2013). Moreover, the World Health Organization (WHO, 2004) pointed out that 60% of an individual's health and quality of life depends on his or her lifestyle behaviours.

On the other hand, health risk behaviour was defined generally, as the activities that increase a person's vulnerability or susceptibility to negative health outcome (Gurrusi et al., 2008). In contrast, health-promoting behaviours are a positive approach to living and a means of increasing well-being and self-actualization (Aldeen & Ibrahim, 2014).

Consequently, uninformed, the university students could formulate inaccurate and incomplete notions or attitude regarding health and/or lifestyles such as smoking habits, alcohol and drug uses (Dawson et al., 2007). Therefore, as far as university students are vulnerable, with regard to lifestyle choices, there is a need to provide research-based evidence to educate young university students on the lifelong implications of their choice, which might later influence their health behaviours (Adlaf et al., 2005).

However, despite all evidence of poor health and prevalence of risky health behaviours, literature indicates that university students are the most under-researched group, with regard to their health and lifestyle patterns (Van Rustenburg & Surujal, 2013). There is evidence that majority of university students are minimally engaged in health promoting behaviours and exhibit behavioral health risk, such as tobacco use, alcohol and drug abuse, unhealthy diet and sedentary habits (Aldeen & Ibrahim, 2014). More so, health risk associated diseases such as depression, obesity, and hypertension, has been widely reported among university students in many countries (Mikolajczyk et al., 2009).

1.1. Background of the Study

Nigeria is the most populous country in sub-Saharan Africa with an estimated area of 923,773 km² (Aregbeshola, 2011), comprising of 36 states and a population of 152 million people (Akuede et al., 2012). Based on natural landscape,
Nigeria is divided into three regions namely: Northern region, Western region and Eastern region, by the intersection of the River Niger and the River Benue before terminating into the Gulf of Guinea (Philips, 2004).

The geographical location of the Federal Republic of Nigeria is on the Gulf of Guinea in the West Africa. It is between Benin in the west and Cameroon in the east, in the north is Chad in the north east and Niger in the north-west (figure 1.1). The diversity of climates observed in Nigeria are aridity in the north, tropical in the centre, and equatorial in the south, with a maximum temperature above 32 degrees Celsius in the north also the annual rainfall is more in the south 2000 millimeters than in the north 500-700 millimeters (Aregbesola, 2011). Therefore, the northern region is exposed to a prolonged heat, prolonged drought, and dry seasons, this harsh environmental conditions is expected to affect growing of crops, vegetation, and grazing of animals, sources of domestic water and sanitation and farming among others.

Figure 1:
Map of Nigeria Showing the Three Regions by the Intersection of the Niger River and Benue River, Available at: http//: mans.com [Date of accessed 20th July, 2014]

Consequently, it is assumed that the environmental conditions will affect both the physical health and psychological health of Nigerians living in the northern region, and their lifestyles behaviours, differently from those living in the other two regions (Terrass & Benjelloun, 2010). However, no comparative cultural study exists in Nigeria that examines the attitudes and lifestyle differences of the three regions, by gender across any selected population group.

1.2. Alcohol Habits

Substance abuse (alcohol and drugs) are becoming a global health problem and it correlated positively with other unhealthy behaviours such as smoking, addiction and high-risk sexual behaviour (WHO, 2006). In addition, alcohol abuse has been linked to adverse health effects such as liver cancer, depression, mental illness, including social consequences such as rapping, drink driving, armed robbery, unemployment, poverty and family related problems (WHO, 2006).

Worldwide, alcohol use causes about (3%) of deaths 1.8 million annually, which is equal to (4%) of global disease burden (WHO, 2005).

The abuse of alcohol among university students contributes to a worldwide public health problem and is one of the main causes of poor academic performance and drop out among both male and female students (Lihan et al., 2008). Consequently, there is a need to understand students’ attitude towards banning of alcohol sales on university campuses. Gender differences with regard to alcohol use have been reported. For instance, (El Ansari et al., 2011), showed that higher percentage of male students uses alcohol compared to their female counterparts.

A study conducted among university students in Brazil by (Pillon et al., 2005) indicated that (84%) of male students reported the use of alcohol substances compared to only (16%) of female students in the study. Similarly, studies from EU countries and USA found that more male students compared to female students reported drug use (e.g. Keller et al 2007; El Ansari et al., 2011). However, none of the aforementioned studies advanced any reason for the gender disparity found in their study. Conversely, Adewuya et al. (2006) in a study among students in Nigeria found that more females than males reported a higher frequency of substance dependence.

1.3. Cigarette Smoking and Public Health

Tobacco smoking is an unhealthy lifestyle with a great public health impact. About five million people die each year from tobacco consumption (WHO, 2005). It has been observed that Tobacco smoking is the largest preventable risk factor for morbidity and mortality in developed countries, where at least one in four adults smoke cigarettes (Nawaz & Naqvi, 2008). Tobacco smoking is a major health hazard that influences the risk for many different diseases such as cancer, coronary heart diseases and congenital defects in children whose mothers smoke during pregnancy (Garcia et al., 2007). Among the university student’s population, there is enough evidence to show that cigarette smoking is on the rise for both male and female (Steptoe et al., 2002; Fawibe & Shittu, 2011). However, limited studies on the use of cigarette among
university students have also limited the much-needed evidence critical in planning intervention programmes for student population. Currently, no study examines students' attitude towards smoking, banning of smoking and/or the sales of cigarettes on university campuses. Consequently, Prokhorov et al., (2008) in conclusion of their literature review recommended that conducting future research is necessary to understand the factors associated with cigarette smoking among university students.

However, there is evidence that greater percentage of smokers among university students are male students. For instance, Fawibe and Shittu (2011) examined the prevalence and characteristics of cigarette smoking in (n = 1754) students in a Nigerian university. The result showed (7.7%) of males as smokers with an average of 1-20 cigarettes per day, compared to (2.0%) of female students are current smokers with an average of two cigarettes per day. However, the authors argued that their result was similar to the national prevalence rates reported for the general population in Nigeria by (WHO, 2008).

Similarly, higher prevalence of male smokers was also reported by (Steptoe et al., 2002), whereas Erdogan & Erdogan et al., 2009) found no gender differences among students who are on the occasional smoking category. The perception by many students that cigarette smoking can reduce weight, stress, depression and anxiety (Garcia et al., 2007) is a wrong information and potentially dangerous. On the contrary, smoking is associated with psychological problems, which include stress and depression (Kenney & Holahan, 2008). There is evidence that many female students initiate smoking as a means of reducing body weight (Garcia et al., 2007).

Similarly, a study by Carroll et al. (2006) found that smoking was associated with weight loss. There is a public health need to challenge the idea that smoking can reduce weight and that girls with thin body is better appreciated in the society (Carroll, et al., 2006). However, Piko (2002) found that student's wrong impression about smoking and health may be due to poor knowledge about the health implications of smoking. Consequently, Carroll, et al. (2006) postulated that smoking should not be considered as independent health behaviour, since there is evidence that smoking correlates positively with other unhealthy behaviours such as alcohol and drug abuse.

2. Research Methods

2.1. Ethical Considerations, Consent and Confidentiality

The present study involved only healthy and non-vulnerable adults from the age of 18 years, and no stage of the data collection involved any invasive procedure, emotional or psychological impact, consequently clearance from the University Ethics Committee in Nigeria was not required. However, the researcher sought permission to conduct the research from all the participating universities in Nigeria. A letter for approval was presented by hand directly to each Vice Chancellor (VC) of the participating university.

The letter contained the required information concerning the research: title, objectives and the data collection techniques. Also, it, explained that the participants consent would be sought before administering the questionnaire, and that their confidentiality will be assured by employing a self-anonymous questionnaire, which does not ask participants name, address or any other form of identification. The letter also explained that the participants have a right to withdraw from the study at any time without any legal implication.

Prior to data collection, the researcher explained the content of the research and what it takes to participate to the participants in each classroom and lecture venues before distributing the questionnaire to the students. Each questionnaire was attached with a consent form for each participant to feel before ticking the questionnaire. They were made to understand that participating in the study was voluntary and that any student has a right to withdraw at any time without any legal implications.

2.2. Sample Size

A potential sample of 2500 male and female university students in Nigeria were recruited for this study, and from this figure, 2112 participants completed and returned their questionnaire correctly, while 563 were invalid. However, 1549 respondents provided all the required data that was entered into the SPSS for analysis.

2.3. Procedure for Data Collection

There are three categories of universities in Nigeria namely: Federal Universities, State Universities and Private Universities. To achieve a national student’s representative sample, this study sampled students from each of these three university categories. A total of (n =2500) students' sample of both male and female was targeted. To ensure that these samples have equal representation by institution, course and year of study the intended sample (n = 2500 ± 300) was shared equally among the three university categories resulting in (n = 833) participants estimated from each university category (Federal, State and Private). Two universities were recruited from each category, consequently, (n = 833) participants were shared into two, allowing a sample of (n = 416) from each participating university. On the other hands, two disciplines were sampled from each participating university, so (n = 416) was shared into two, allowing (n = 208) participants to be recruited from each academic discipline. Finally, four academic years was shortlisted (cut off point) from each academic discipline, consequently, the sample (n =208) was shared among four academic years, allowing (n = 52) students to be recruited from each academic year in each university (Table 1).
Table 1: Sampled Universities and Courses of Study

| University categories | Federal Universities | State Universities | Private Universities |
|-----------------------|----------------------|--------------------|----------------------|
| Sampled Universities  | Obafemi Awolowo University  |
|                       | University of Uyo      |
|                       | Osun State University  |
|                       | Akwa Ibom State University |
|                       | Obon State University  |
|                       | Oduduwa State University |
| Sampled courses       | Medicine History       |
|                       | Accounting Agriculture |
|                       | Microbiology Economics |

2.4 Data Collection

Data collection was based on self-reported questionnaire. Data were collected from six universities across different cities in Nigeria (Table 1). The data collection took place between April and June 2013. Respondents are from different disciplines (Table 1). Respondents were encouraged to complete the questionnaire independently, and to be as honest as possible. The questionnaire was given to the participants during lecture with all the students’ on-sit.

2.5 Statistical Data Analysis

Students responses to the questions in the present study was transferred to the SPSS statistical package, 20.0 version, which enabled both frequencies and percentages to be computed, which was later presented in a tabular form for easy understanding. All responses where sex and ethnicity were not indicated were automatically excluded from the data analysis. Also, those responses where the respondent ticked more than one alternative were also removed. I checked the scale data first using the Kolmogorov-Smirnov test to ensure that they were acceptably normal before parametric statistics were used. Similarly, Levene’s test was used to ensure homogeneity of variance before ANOVAs test was performed.

To answer the research questions and achieve the research objectives, three separate tests were conducted: Descriptive statistics, non-parametric tests and parametric tests. Descriptive statistics: preliminary data analysis of this study was conducted with descriptive tests, which also enabled screening and cleaning the data and to check the entire data set entered into the SPSS for errors. In addition, descriptive statistics made it possible for the description of the characteristics of the sample in percentage, mean, and standard deviation. Chi square test was employed to explore the relationship between categorical variables. Furthermore, the study also employed both the one-way ANOVA, two-way ANOVA to examine the differences and interactions.

3.0 Result

3.1 Smoking of Cigarette

With regard to current smoking, there was significant differences by sex and ethnic (Table 2) and the result shows that only very few students are current smoker compared to non-smokers.

Table 2: Chi-square Analysis Showing Frequency (%) of Lifestyle Behaviors by Sex and Ethnicity
Overall, male students smoked more than females, the effect size indicated that the association of smoking with males was much compared to females \( (r = .092) \). Hausa males smoked more while Igbo males smoked the least. On the other hand, while Hausa females smoked more, Igbo females also smoked the least. These analyses are presented graphically in (Figure 2) showing frequency of current smokers by sex and ethnic groups. The graph shows that while Hausa ethnic groups had more students in both male and female that are current smokers, the Igbo ethnic group had the lowest number of students in both male and female that are current smokers.

3.2 Health Campus Environment

Chi-square analysis was conducted, with regard to keeping a healthy campus environment, gauged with no smoking and no alcohol on campus (Table 2). When the categories of those who agree and those who strongly agree that there should be no smoking on campus, the overall sample showed that \( (76\%) \) of the sample supported banning smoking on campus. However, when the analysis was conducted for gender and ethnic, the result showed significant differences where females are more than males, and more Hausa than Igbo and Yoruba.

On the other hand \( (79\%) \) of the sample supported alcohol ban on campus. When the analysis was examined by sex and ethnic, the result showed no significant differences between male and female students, whereas among ethnic groups, more Hausa reported banning alcohol on campus than Igbo and Yoruba. The analysis is shown graphically in (3). It shows that majority of the students from the Yoruba ethnic group, did not support banning the use of alcohol on campus.

4. Discussion

4.1 Smoking Habits

The result of the current study indicates that only few students about \( (5\%) \) are current smoker (Table 2). The study provides evidence that smoking is not a public health issue among students in Nigeria. Similar findings were reported by WHO (2008) and Fawibe and Shittu, (2011) among university students in Nigeria. However, Fawibe and Shittu (2011) attributed low smoking among university students in Nigeria to income insufficiency, strong religious attachments and cultural orientations.

Consequently, the low rate of smoking and drug use among young adults in Nigeria especially university students may be attributed to a regular public health campaign by both governments and religious organizations in Nigeria (Idehene & Ojekwumi, 2010). More so, when drug use and the health effect of smoking was compared by region and sex, the result showed no significant differences. Absence of any differences by sex and ethnicity may be an indication that the
regular smoking campaign in Nigeria has the same positive impact in both regions and sex. Main effects for sex and ethnicity were found for current smoking, with more males than females reported current smoking in a male to female ratio.

A similar finding among students in Nigeria was reported by (Fawibe & Shittu, 2011). In addition, the World Health Organization (WHO, 2008) reported in a study among the general population in Nigeria, that the smoking rate of Nigerians in general was low with females lower than males. Similar studies in other countries also provided evidence of high prevalence of smoking among males than females.

With regard to ethnicity, the result suggests that Hausa both males and females smoke more than other groups, while Igbo, both males and females, smoked less than other groups. However, high rate of smoking among the Hausa ethnic group might be related to high stress and depression especially among Hausa females. Studies have shown that stress and depression are associated with smoking initiation, continuation and frequency (Adewuya, 2006). In the current study, higher number of students from the Hausa reported more stress and depression than students from other regions. The current study recommends that more studies should be carried out on the association of stress and depression with smoking among university students in Nigeria.

4.2. Healthy Campus Environment

With regard to keeping the university environment healthy, two common behavioral variables among students were employed: alcohol and smoking. The study indicated that a high percentage of students overall preferred a healthy campus environment with over (86%) and (74%) wanted both smoking and alcohol use to be banned respectively (Table 2). However, a similar study conducted among university students in Egypt reported a greater percentage of students (87.3%) strongly agree for total smoking and alcohol ban in university campuses in Egypt. However, Egypt has more majorities of Muslims and an Islamic state unlike Nigeria that is a secular state. The result indicated sex and ethnicity effects with regard to banning smoking on campus, with more female students indicated banning smoking on campuses.

Smoking is perceived culturally in Nigeria as males' affair and seeing women smoking in certain areas of Nigeria may lead to persecution or stigmatization. However, previous studies indicated that an increasing number of women are smoking cigarettes in Nigeria. (Adewuya et al., 2006; Fawibe & Shittu, 2011), this might be related to urbanization, globalization and migration.

With regard to banning alcohol on campus, the analysis indicated main effects for ethnicity but not for sex. The result suggests that more students from the Hausa ethnic group wanted both smoking and alcohol use be banned on universities in Nigeria. The possible explanation for this attitude is that the Hausa ethnic group are Muslims and there are various prohibitions among Muslims in the use of alcohol, drugs and smoking.

However, there is strong evidence supporting smoking bans and restrictions as effective public health interventions aimed at decreasing exposure to second hand smoke (Nichtcher et al., 2006). The findings of the present study indicated very strongly that both male and female students supported banning of smoking and alcohol on all the campuses in Nigeria (Table 2). However, the current study is the first to investigate students' opinion or attitudes on healthy university environment in Nigeria. This study shows that there is a great support by students in Nigeria to ban alcohol and smoking in universities in Nigeria.

5. Conclusions

This study focused mainly on students' attitudes towards banning of alcohol and cigarette smoking among university students in Nigeria. The study aims at the understanding of students towards the health implications of risky health behaviours. The findings from this study have not been presented in Nigeria, which makes comparison with previous studies difficult. However, the multi-ethnic and multicultural composition of Nigeria, demands an understanding of how they interact with sex to determine health inequality by sex and ethnicity in Nigeria, especially among university students, for the first time. In addition, the findings of this study suggested that lifestyle behaviours indicated significant associations with ethnicity more than sex. This is a unique finding, because this will determine the direction for future health intervention in Nigeria. The finding indicates the influence of culture and ethnicity as a key factor in health inequality in Nigeria. While more studies are needed to establish this observation, this study suggests that health interventions in Nigeria to be effective should be directed towards ethnicity and cultural changes.

5.1. Limitations of the Study

Participants for the present study were limited to six universities in Nigeria. It should be expected that the experiences and needs of other students might not be accurately reflected by the investigation. Another caution inherent in the current investigation concerns the homogeneity or lack of diversity, of participants. Consequently, since the participants involved only students in higher institutions, the findings may not reflect the true condition of adolescent youths in Nigeria. Additionally, since not all the universities in Nigeria were used, there may be variations between universities that may have been overlooked. Consequently, there is a need for more studies among university students in Nigeria. Another limitation of this study may be due to the self-report nature of the instruments. Due to the instruments relying on the participants perceptions, the accuracy of the study could be influenced by imprecise self-reports or mistaken perceptions of a situation. Due to participants, trying to anticipate the socially 'correct' answer rather than honestly, the reliability of instruments is always a concern in self-report situations.

The findings of the current study may be limited because of the methodology utilized. Similar to all cross-sectional studies, the present study can only be interpreted based on observed associations of variables, and not on cause and effect relationship with a causal interpretability of results. In spite of the various limitations anticipated, the current study took
adequate steps in the research process to minimize bias. The large number of participants, the high response rate obtained, the multistage method of sampling, and the full geographical representation of students' population, with a rigorous statistical analysis, makes the current study a true reflection of what may be obtainable among university students in Nigeria.

5.2. Recommendations
We recommend that similar study should be conducted using qualitative methods and study groups so as to establish why students may be engaging on a risky lifestyle behaviour despite its health consequences.

6. References
i. Al-Naggar, A. R., Bobryshev, Y. V., Noor, N. A., Noor, B. M. (2013). Life style practice among Malaysian university students. Asian Pacific Journal of Cancer Prevention vol.14, 3, 1895.
ii. World Health organization. (WHO, 2005). Preventing chronic diseases: a vital investment. WHO global report. Geneva: World Health Organization. Retrieved on May, 21, 2013, from http://www.who/chn/chronic_disease_report/fo
iii. Garrusi, B., Safizadch, H., & Pourhosseni, O. (2008). A study on the Lifestyle of the Iranian university students. Iranian Journal of psychiatry and Behavioural Sciences, 2(2).
iv. Aldeen, L. D., & Ibrahim, C. (2014). Knowledge and practice of dietary and healthy lifestyle in a sample of medical and non-medical college students in Baghda. World Family Medicine Journal, 12 (Aldeen 3).

v. Dawson, A. J., Sunguiet, J., & Johansson, S. (2005). The influence of ethnicity and length of time since immigration on physical activity. Journal. Ethnicity and Health, 10(4) 293-309.
vi. Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). The prevalence of elevated psychological distress among Canadian undergraduates: Findings from the 1998 Canadian campus survey. Journal of American College Health, 50(2), 67-72.

vii. Van Rensburg, C. J., & Surujlal, N. (2013). Gender differences related to the health and lifestyle patterns of university students. Journal of Interdisciplinary Health Science, 18 (1).

viii. Wang, D., Ou, C., Chen, M., & Duan, N. (2009). Health-promoting lifestyles of university students in Mainland China. Journal of the British Medical Council of Public Health, 9, 379.
ix. Aldeen, L. D., & Ibrahim, C. (2014). Knowledge and practice of dietary and healthy lifestyle in a sample of medical and non-medical college students in Baghda. World Family Medicine Journal, 12 (Aldeen 3).

x. Mikolajczczyk, R. T, Maxwell, A. E, Naydenova, V, Meier, S., & Ansari, W. (2008). Depressive symptoms and perceived burdens related to being a student: Survey in three European countries. Journal of Clinical Practice and Epidemiology in Mental Health 4, 19.

xi. Areboghosa, R. A. (2011). The political, economic and dynamics of Nigeria: A synopsis. Asian Briefing, 39, 1-7.

xii. Akuede, O., Idogho, P.O., & Imonikhe, J. S. (2012) Increasing access to university education in Nigeria: Present challenges and suggestions for the future. The African symposium, 12(1), 3-12. 17.

xiii. Philips, D. A. (2004). Nigeria geography. Philadelphila; Chelsea House

xiv. Terrass, F. Benjellou, M. (2010). The effect of water shortages on health and human development. Perspectives in Public health, 132(5).

xv. Uche, C. (2010). Poverty in Nigeria: some dimensions and contributing factors. Global majority. E-Journal, 1(1), pp. 46-56.

xvi. Iyedone, E. E., & Ojewumi, A. K. (2010). Religiosity and the preventive health behaviour. Journal of Life Psychology. Retrieved on April 16, 2012 from, http://readperiodicals.com/201003/19732388/>.html

xvii. WHO. (2005). Promoting mental health. World Health Organizations report, P.27. Retrieved on October, 13, 2014, from http://www.who.int.

xviii. World Health Organization. (WHO, 2006). WHO Health Promotion Glossary: new terms. Geneva Health Promotion International, 21(14), PP. 340-345.

xix. El Ansari, W., Stock, C., John, J, Deany, P., Phillips, C., Snelgrove, S., Adetunji, H., Hu, X., Parke, S., Stoaat, M., & Mabha, A. (2011). Health Promoting behaviours and lifestyle characteristics of students at seven universities in the UK. Central European Journal of Public Health, 19(40), 197-204.

xx. Lihan, O., Yildrim, F., Demirabas, H., & Dogan, B. (2008). Alcohol use prevalence and scio-demographic correlated of alcohol use in a university students sample in Turkey. Social Psychiatry and Psychiatric Epidemiology, 43(7), 575-583.

xxi. Pillon, S. C., O’ Brien, B., & Chavez, K. A. P. (2005). The relationship between drug use and risk behaviour in Brazilian university students. Revista Latino-Americana de Enfermagem, 13 (2).

xxii. Keller, S., Maddock, J. E., Hannover, W., Thyrian, J. R., & Basler, H. D. (2007). Multiple health risk behaviours in German first year university students. Journal of Preventive Medicine, 46, 189-195.

xxiii. Stepotoe, A., Wardle, J., Fuller, R., Davidsdottir, S., Davou, B., & Justo, J. (2002). Seatbelt use, attitudes, and changes in legislation: An international study. American Journal of Preventive Medicine, 23, 254-259.

xxiv. Erdogan, N, & Erdogan, I. (2009). Smoking at school. Views of Turkish university students. International Journal of Environmental Research in Public Health, 6, 36-50.

xxv. Kenney, B. A., & Hollahan, C. J. (2008). Depressive symptoms and cigarette smoking. Journal of American College Health, (56)4.
xxvi. Carrol, S., Lee, R., Kaur, H., Harris, K., Strother, M., & Huang, T. (2006). Smoking, weight loss intention and obesity-promoting behaviours in college students. *Journal of the American College of Nutrition*, 25(4), 348-353.

xxvii. Field, A. (2009). Discovering Statistics using SPSS (3rd) London; Sage publication p.58.

xxviii. Field, A. (2009). Discovering Statistics using SPSS (3rd) London; Sage publication p.58.

xxix. Adewuya, A. O., Ola B., A., Aloba, O. O., Mapayi, B. M., & Oginni, O. O. (2006). Depression amongst Nigerian university students. *Journal of Social Psychiatry and Psychiatry Epidemiology*, 41; 674-678.

xxx. Webb, E., Ashton, C. H., Kelly, P., & Kamali, F. (1996). Alcohol and drug use in UK university students. *Lancet*, 348, 922-25.

xxxi. Nawaz, A., & Naqvi, S. (2008). Attitudes, perceptions, habits of smoker, non-smoker general practitioners and why they fail to motivate patients to quit smoking. *Pakistan Journal of Medical Science*, 24(1), 152-156.

xxii. Garcia, D., Sanchez, V., Casares, V., Presa, C., Martinen, E. & Gonzalez, Z. (2007). Tobacco uses amongst nursing and physiotherapy students a cross sectional questionnaire survey. *International Journal of Nursing Students*, 44, 780-785.

xxiii. Steptoe. A., Wardle. J., Fuller. R., Davidsdottir, S., Davou. B., & Justo, J. (2002). Seatbelt use, attitudes, and changes in legislation: An international study. *American Journal of Preventive Medicine*, 23, 254-259.

xxiv. Fawibe A. E., Shittu, A. O., (2011). Prevalence characteristics of cigarette smokers among undergraduates of the University of Ilorin. *Nigerian Journal of Clinical Practice*, 14, 201-205.

xxv. WHO. (2007). Depression Episode, international classification of diseasesICD-10, Chapter 5, F32. Retrieved on November, 19, 2008, from http://www.who.int/classification/appa/icd10online[Accessed].

xxvi. Nichtcher, M., Nichtcher, M., Lloyd-Richardson, E. E., Flaherty, B., Carkoglu, A., & Taylor N. (2006). Generated Dimensions of smoking among college students. *Journal of Adolescent Research*, 215(21), 215-244.