

## Demographic Factors as a Determinant of Health status of Female Undergraduates of University of Ilorin, Nigeria.

S.K. Olubiyi<sup>1</sup>, J. F James<sup>2</sup>, L.O. Olaitan<sup>3</sup>, R.L. Abubakar<sup>4</sup>, A.B. Ayeni<sup>5</sup>

<sup>1,5</sup>Department of Nursing Science, Achievers University, Owo, Ondo State

<sup>2,3,4</sup>Department of Human Kinetics and Health Promotion, University of Ilorin

Corresponding author: [simeonolubiyi@gmail.com](mailto:simeonolubiyi@gmail.com).

---

### Abstract

This study examined the demographic factors as a determinant of health status of female undergraduates of University of Ilorin. The objectives of the study were to investigate whether parents' socio-economic status, educational background, cultural background and religious background determine the health status of female undergraduates of University of Ilorin. Descriptive research design of survey type was adopted for this study with multi-stage sampling techniques which consisting of simple random, stratified, proportional and systematic sampling technique were used to select 200 respondents. Researcher's self-structured questionnaire was used and Test-re-test to establish the reliability of the study. Data collected were analyzed using both descriptive and inferential statistics of frequency counts, percentages and Chi-square for the hypotheses at 0.05 alpha level using SPSS software version 20.0. The findings of the study showed that parents' socio-economic status, educational background, cultural background and religious background were determinant factors of health status of female undergraduates of University of Ilorin. It is recommended that greater awareness to improve lifestyle practices, reduce risk behaviours and protect the environment contributes to an improved health status of the community should be carried out by the government. The government should also invest in strategic thinking, planning and programming to address the determinants of health in the long term and the risk reduction objectives contributing to reduction of the burden of diseases and mortality in the short and intermediate terms especially among female students.

**Key Words:** *Female undergraduates, Socio-economic status, Educational background, Religious background, Demographics,*

---

### INTRODUCTION

Human health is made up of nature and nurture. The health of the people is an asset for the growth and development of the nation. Health depends on the perception of individuals because the definition of well-being to individual is similar but different (Adeniyi and Ogunsola, 2010). Agbeko (2010) defined health as an optimal personal fitness for full fruitful creative living. Health is maintained and improved not only through the advancement and application of health science but also through the efforts and intelligent behavioural choices of the individual and society. Health and illness are not 'either/or' states because, in reality, people can feel quite healthy even though they may be living with an illness. Each of these approaches has its own value, but no single approach is universally valid. Indeed, there is overlap between many of the approaches.

Demographic factors are socio-economic characteristics of a population expressed statistically as educational status of parents, economic status of the parents, cultural background, religious background, age, gender, marital status, occupation, religion, birth rate, death rate and size of the family (Shehu, 2005). The demographic factors of educational status of parents, economic status of the parent, cultural background, gender, marital status and religious affiliation plays significant role in the life of an individual (Shehu, 2005). The identified demographic factors have positive and negative effects on man's state of health, but the improvement, corrections and preventive measures are acquired through man's health-seeking behaviour.

Health is a dynamic concept with multiple meanings that are dependent on the context in which the term is used and the people who use it. People see health as essential to well-being, but how people define their own health varies according to their own social experience, particularly in relation to their age, personal knowledge, social and illness experiences. Health is intrinsically tied to people's sense of well-being and therefore occupies a higher order of meaning in people's lives (Anand, 2017). Health is shaped by factors not entirely medical. Health is therefore not something that medical doctors provide for people, but rather, it is something an individual and community achieve by themselves. Agbeko (2010) claimed that people's attitudes to health often affect personal and societal concepts which are based on experiences and views on well-being. Health status is a process by which an individual acts to maintain the state of physical fitness and well-being that enables man to manage the physical, social and biological environments to his own satisfaction.

One of the major tasks of education is to help children to develop the skills which promote a lifetime of learning. Educationist and counselors in educational setting are often confronted with students who appear to have above average scholastic aptitudes but are very poor in their studies. A recurring question baffling them has been why some students succeed in their study and while others do not. This question is sometimes considered to be closely related to academic need achievement. Efficient learning depends not only on good teaching method but on satisfactory learning procedures. Adeaga and Akinleke (2012) are also of the view that students do badly academically on account of factors other than low intellectual capacity.

Tiwan and Basal (2014) mentioned that a child with high academic achievement is likely to be well-treated and well behaved, while independent and low achievers are incapable and deprived of employment which may lead to maladjustment in life. Education is synonymous to knowledge and knowledge is synonymous to high academic need achievement. In the views of Alaba (2014) education is the total experiences an individual acquired from the day he/she is born till death. It is crystal clear that all human experiences in life both within the school and outside the school setting constitute education such as learning to eat and dance.

Education also in its broadest sense may be defined as a process designed to inculcate the knowledge, skills, and attitudes necessary to enable individuals to cope effectively with their environment. Its primary purpose is to foster and promote the fullest individual self-realization for all people. Therefore to achieve the educational objectives and ensure effective performances

among universities female undergraduates, there is a need to first and foremost assess the impact of some demographic factors such as educational status of parents, economic status of the parent, cultural background and religious background in order to find out their impact on the academic need. By having the right course of study which will in turn motivate and ginger such students to set up a target and work towards achieving the set target. Wrong placement in a course of study very often affects the performance of students in many respects as it affects the zeal and enthusiasm of such individual especially in area of academic needs achievement (Verma, 2010).

Health can be considered in terms of a person's body structure and function and the presence or absence of disease or signs (**health status**); their symptoms and what they can and cannot do i.e. the extent to which the condition affects the person's normal life (**quality of life**). **Health care** is the prevention, treatment, and management of illness and the preservation of health through the services offered by health care organizations and professionals. It includes all the goods and services designed to promote health, including "preventive, curative and palliative interventions, whether directed to individuals or to populations" (World Health Organization Report, 2010). mHealth status is an individual's relative level of wellness and illness, taking into accounts the presence of biological or physiological dysfunction, symptoms, and functional impairment. Health perceptions (or perceived health status) are subjective ratings by the affected individual of his or her health status. Some people perceive themselves as healthy despite suffering from one or more chronic diseases, while others perceive themselves as ill when no objective evidence of disease can be found, (Wilson & Cleary, 2015).

The term demographic refers to particular characteristics of a population. The word is derived from the Greek word for people (demos) and picture (graphy) and demographic information provides data regarding research participants and is necessary for the determination of whether the individuals in a particular study are the representative sample of the target population for generalization purposes.

## STATEMENT OF THE PROBLEM

Illiteracy status of some parents endangers the lives of their children, as some parents could not comprehend the effects or consequences of some health issues. They ignore some certain health warnings because they did not see or understand any dangers attributed to such health issues, such as a matter of HIV/AIDS. Poverty also contributes immensely to ill-health of some female undergraduates in some of the tertiary institutions in Nigeria as some poor parents cannot afford to cater for all the health needs of their children. This act

endangers the lives of the students with its toll on their academic performance.

The practice of unhealthy status and health related problems cut across different demographic parameters of the female undergraduate students of University of Ilorin on demographic factors as a determinant of health status of female undergraduates of University of Ilorin.

### Research Questions

The following research questions were used to guide the study;

1. Will socio-economic status of parents be a determinant of the health status of female undergraduates of University of Ilorin?
2. Will educational status of parents be a determinant of the health status of female undergraduates of University of Ilorin?
3. Will cultural background of parents be a determinant of the health status of female undergraduates of University of Ilorin?
4. Will religious background of parents be a determinant of the health status of female undergraduates of University of Ilorin?

### Research Hypotheses

The following hypotheses were formulated to guide the study;

1. Socio-economic status of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.
2. Educational status of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.
3. Cultural background of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.
4. Religious background of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.

### METHODOLOGY

The research design for this study was descriptive survey in nature. The population for the study consists of all female undergraduates in University of Ilorin. A multi-stage sampling technique was used for this study. Simple random sampling technique of simple balloting was used to select five (5) faculties out of fifteen (15) faculties in University of Ilorin. Proportionate sampling technique of 1% was used to select the respondents. Simple random sampling technique was used to select the actual respondents (200) for the study. Section A focused on the demographic data of the respondents, while Section B dealt with the item raised from the research hypotheses generated for this study. A

Likert rating scale format of Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD) was employed for this study. The instrument was assured for face and content validity while a Test re-test method of reliability was used to establish the reliability of this study through a pilot study at Kwara State University, Malete. A correlation co-efficient of .76 was obtained. **The questionnaires were distributed by the researcher and three** trained research assistants. The completed instrument was collated, coded and analyzed using frequency counts and percentages for the demographic data of the respondents, while inferential statistics of chi-square was used to test the stated hypotheses at 0.05 alpha level of significance using SPSS version 23.0.

### FINDINGS

Table 2 shows that 23 (11.5%) of respondents were students of faculty of arts, 49 (24.5%) were from faculty of Education, 47 (23.5%) were from physical Sciences 49 (24.5%) were from faculty of Engineering and Technology and 32 (16.0%) were from faculty of Social Sciences. Therefore more respondents from faculty of Education and Engineering respectively took part in the study. It also shows that 41 (20.5%) of the respondents are in 100L, 68 (34.0%) are in 200L, 44 (22.0%) are in 300L, 32 (16.0%) are in 400L and 15 (7.5%) are in 500L. Therefore more 200L students took part in the study. Finally, it shows that 41 (20.5%) of respondents are between the ages of 17-19 years, 87 (43.5%) were between the ages of 20-23 years, 62 (31.0%) were between the ages of 24-27 years and 10 (5.0%) were 28 years and above This shows that more respondents between the ages of 20-23 years took part in the study.

### Test of Hypotheses

**Hypothesis 1:** Socio Economic Status of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.

The Table 3 shows that the calculated chi square ( $\chi^2$ ) value is 280.9 and the critical value is 16.9 with degree of freedom of 9 at 0.05 level of significance. Since the calculated chi square ( $\chi^2$ ) value (280.9) is greater than the critical value (16.9), the null hypothesis was rejected. Therefore, Socio Economic Status of parents will significantly be a determinant of the health status of female undergraduates of University of Ilorin.

**Hypothesis 2:** Educational Status of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.

Table 4 shows that the calculated chi square ( $\chi^2$ ) value is 204.8 and the critical value is

16.9 with degree of freedom of 9 at 0.05 level of significance. Since the chi square ( $\chi^2$ ) value (204.8) is greater than the critical value (16.9), the null hypothesis was rejected. Therefore, Educational Status of parents will significantly be a determinant of the health status of female undergraduates of University of Ilorin.

**Hypothesis 3:** Cultural Background of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin.

Table 5 shows that the calculated chi square ( $\chi^2$ ) is 164.3 and the critical value is 16.9 with degree of freedom of 9 at 0.05 level of significance. Since the chi square ( $\chi^2$ ) value (164.3) is greater than the critical value (16.9), the null hypothesis was rejected. Therefore, Cultural Background of parents will significantly be a

determinant of the health status of female undergraduates of University of Ilorin.

**Hypothesis 4:** Religion background of parents will not significantly be a determinant of the health status of female undergraduates of University of Ilorin

Table 6 shows that the calculated chi square ( $\chi^2$ ) value is 287.6 and the critical value is 16.9 with degree of freedom of 9 at 0.05 level of significance. Since the chi square ( $\chi^2$ ) value (287.6) is greater than the critical value (21.0), the null hypothesis was rejected. Therefore, Religion background of parents will significantly be a determinant of the health status of female undergraduates of University of Ilorin.

**Table 1: Distribution of Respondents by Faculties**

S/N	Faculties	Number of Departments	Number of Female Undergraduates	Sample size (1%)
1.	Education	9	4700	47
2.	Arts	7	4400	44
3.	Physical Science	9	3600	36
4.	Social Science	6	4400	44
5.	Engineering & Tech.	8	2900	29
	<b>Total</b>		<b>20000</b>	<b>200</b>

**Table 2: Distribution of Respondents by Demographic data**

S/N	Faculty	Frequency	Percentage (%)
1	Arts	23	11.5
2	Education	49	24.5
3	Physical Sciences	47	23.5
4	Engineering & Technology	49	24.5
5	Social Sciences	32	16.0
	<b>Total</b>	<b>200</b>	<b>100</b>

  

S/N	Level	Frequency	Percentage (%)
1	100L	41	20.5
2	200L	68	34.0
3	300L	44	22.0
4	400L	32	16.0
5	500L	15	7.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

  

S/N	Age Range	Frequency	Percentage (%)
1	17-19 years	41	20.5
2	20-23 years	87	43.5
3	24-27 years	62	31.0
4	28 years and above	10	5.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

**Table 3: Chi square analysis on Socio Economic Status as a determinant of Health Status**

	SA	A	D	SD	Row Total	DF	CAL $\chi^2$	CRIT. Value	REM.
1. Parents with low income cannot care for their children health needs therefore endanger their health lives	92 (46.0%)	22 (11.0%)	30 (15.0%)	56 (28.0%)	200				
2. Students with poor parents lack basic nutritious diet and thus have malnutrition problem	103 (51.5%)	52 (26.0%)	22 (11.0%)	23 (11.5%)	200				
3. Students whose parents are low income earners lack financial support to attend hospitals when sick	101 (50.5%)	46 (23.0%)	28 (14.0%)	25 (12.5%)	200	9	280.1	16.9	He Rejected
4. Parents low income status affects the health of their children by restricting their ability to pay for gymnasium for regular exercise	90 (45.0%)	60 (30.0%)	28 (14.0%)	22 (11.0%)	200				
<b>Column Total</b>	<b>386</b>	<b>180</b>	<b>108</b>	<b>126</b>	<b>800</b>				

**Table 4: Chi square analysis on Educational Status of Parents as a determinant of Health Status**

	SA	A	D	SD	Row Total	DF	CAL $\chi^2$	CRIT. Value	REM.
5. Parents with higher education are more open to new ideas which will help modify their children health status by taking prompt action on their sickness or illness	76 (38.0%)	53 (26.5%)	29 (14.5%)	42 (21.0%)	200				
6. Parents level of education influences both accessibility to information and ability to process new information about health	99 (49.5%)	46 (23.0%)	39 (19.5%)	16 (8.0%)	200				
7. Obesity is more common among female undergraduates whose parents have low education than those with higher education status	82 (41.0%)	67 (33.5%)	28 (14.0%)	23 (11.5%)	200	9	204.8	16.9	He Rejected
8. Students whose parent have low education are often physically inactive than those with higher education	89 (44.5%)	56 (28.0%)	39 (19.5%)	16 (8.0%)	200				
<b>Column Total</b>	<b>346</b>	<b>222</b>	<b>135</b>	<b>97</b>	<b>800</b>				

**Table 5: Chi square analysis on Cultural Background of Parents as a determinant of Health Status**

	SA	A	D	SD	Row Total	DF	CAL $\chi^2$	CRIT. Value	REM.
9. Prohibition of foods like egg and meat to children for fear that they will become thieves is causing prevalence of kwashiorkor	106 (53.0%)	32 (16.0%)	40 (20.0%)	22 (11.0%)	200				
10. Unhealthy and early marriage practices as a cultural practice could lead to vesico-vaginal fistula	93 (46.5%)	52 (26.0%)	36 (18.0%)	19 (9.5%)	200				
11. Scarification and tribal marks of female students often put stigma on them and they are seeing as outcast and thus keep them moody always which affect their health	58 (29.0%)	62 (31.0%)	53 (26.5%)	27 (13.5%)	200	9	164.3	16.9	He Rejected
12. Female circumcision could lead to serious infection on students thus affecting their health status	51 (25.5%)	57 (28.3%)	50 (25.0%)	42 (21.0%)	200				
<b>Column Total</b>	<b>308</b>	<b>203</b>	<b>179</b>	<b>110</b>	<b>800</b>				

**Table 6:** Chi square analysis on Religion Background of Parents as a determinant of Health Status

	SA	A	D	SD	Row Total	DF	CAL $\chi^2$	CRIT Value	REM.
13 Islam view women participation in sports as anti religious because the sportswear are smart looking could be offensive, thus make them live a sedentary life	88 (44.0%)	22 (11.0%)	30 (15.0%)	60 (30.0%)	200				
14 Prohibition of eating of pork meat by some religious group despite its nutritional value denies them certain nutrient	109 (54.5%)	46 (23.0%)	23 (11.5%)	22 (11.0%)	200				
15 Some religious teaching is against HIV counselling and testing because it is perceived as misleading to the society	95 (47.5%)	49 (24.5%)	32 (16.0%)	24 (12.0%)	200	9	287.6	16.9	He Reject ed
16 Sex education is prohibited in some religion because is as promoting promiscuity	98 (49.0%)	53 (26.5%)	26 (13.0%)	23 (11.5%)	200				
<b>Column Total</b>	<b>390 (48.7%)</b>	<b>170 (21.3%)</b>	<b>111 (13.9%)</b>	<b>129 (16.1%)</b>	<b>800</b>				

**DISCUSSION OF FINDINGS**

**Hypothesis 1: Socio-economic status of parents will significantly determine the health status of female undergraduates of University of Ilorin.**

The result of the tested hypothesis one shows that socio-economic status of parents significantly determines the health status of female undergraduates of University of Ilorin. This result is in accordance with Ford (2011), who ascertain that socio-economic status indicates one's access to collectively desired resources, be they material goods, money, power, friendship, networks, healthcare, leisure time, or educational opportunities. And it is access to such resources that enable individuals and/or groups to prosper in the social world. Also, Mikolajczyk (2012) asserted that income status and social support plays both directly and indirectly, in affecting health, by restricting the ability to attend hospital and paying for medications, restricting certain lifestyles such as eating healthy foods, living in good environments, be able to pay for gymnasium for regular exercises and some other luxuries that makes one live a happy healthy life. Wamala, (2010) also reported that unhealthy dietary habits were the second strongest factor after reproductive health accounting for socio-economic differences in obesity among female undergraduates leading to high mortality and economic lost in the country.

**Hypothesis 2: Educational status of parents will significantly determine the health status of female undergraduates of University of Ilorin.**

The result obtained from the tested hypothesis two shows that educational status of parents

significantly determines the health status of female undergraduates of University of Ilorin. This corroborates with the finding of Jose (2013) who affirmed that one's level of education influences both accessibility to information and the ability to process new information; thus individual with a higher level of education often better understand the nature of new technology and its risks. In general, individuals with a higher education are more open to new ideas, which help to modify their lifestyle and health status. Also, Molarius (2013) reported that obesity was more common among female undergraduate whose parents have low education than students with higher education. Also, healthful status differed considerably between the educational levels. Those parents with low education were more often physically inactive, heavy smokers, used more often alcohol and had unhealthy dietary attitudes than those with higher education. The study also shows that those with middle level education were however, more often heavy alcohol users, smoke and had unhealthy dietary attitudes (among men) than those with low education. What leads to such a premise is a clear recognition and acceptance of the fact that individual's exposure to higher education influences what he eats, smoke, and drinks and does in all ramification of his life and those of others around him especially his children.

**Hypothesis 3: Cultural background of parents will significantly determine the health status of female undergraduates of University of Ilorin.**

The result from hypotheses three shows that cultural background of parents significantly determines the health status of female undergraduates of University of Ilorin. The result justified the assertion of WHO (2010) that the

cultural practices of people not only affect their health but also affect all aspects of life including social relationships, contribution to societal functioning and disease condition. Man living in an interactive society is affected by what happens in his environment and how he reacts to it. All people, no matter the race, have their beliefs and practices concerning health and disease. Each society or community has its peculiar way of doing things and these practices go a long way in influencing the people's perception, attitudes and behavior in the management of diseases and health related problems that befall them (WHO, 2010). Also, Ojua and Omono (2012) asserted that culture is a way of life of a people, therefore, the way of lives of people can determine their development over time in all ramifications as compared to global growth and societal development. Hunt (2014) also reported that culture influences peoples' behaviours outside time and space, affecting the historical, geographical, social and political outcome, which appears to either limit or encourage individual's ability to adopt healthier choices in life.

**Hypothesis 4: Religious background of parents will significantly determine the health status of female undergraduates of University of Ilorin**

The result of the tested hypothesis four states that religious background of parents significantly determines the health status of female undergraduates of University of Ilorin. This finding is in accordance with Obot (2012) who affirmed that a state of health exists when there is perfect harmony between man and his environment. This belief is inherent in those who practice African traditional religion as well as in many Christians and Muslims religious practices at one point in time or the other. Ill-health and other misfortunes, which often a times defy scientific and orthodox treatments are explained as spiritual forces directed by witches, wizards, sorcerers, evil spirits

or angered ancestors. Also, Idehene and Ojewumi (2010) noted that variables of religiosity such as (affiliation, attitude, beliefs, and attendance) negatively correlated with health compromising behaviours like alcohol uses, drug uses and smoking. In contrast, Dulin (2016) reported that religious variables such as affiliation and attendance correlated positively with alcohol abuse, poor grade point average, and good social support. Consequently, Dulin (2016) maintained that it is religious affiliation more than any other religious variables that predict alcohol abuse.

**RECOMMENDATIONS**

In the view of the findings in this research, the following recommendations were made:

1. Health education should be given to students about health risks and health status issues that can promote positive healthy life status.
2. Government should invest in strategic thinking, planning and programming to address the determinants of health in the long term and the risk reduction objectives contributing to reduction of the burden of diseases and mortality in the short and intermediate terms especially among female students.
3. The curricula of health, educational, instructional and public information institutions should be re-oriented in a manner that promotes health and encourages healthy status, most especially among female students.

Islamic and Christian teachings should be re-invigorated as it favours solidarity, good conduct, cleanliness, healthy bodies and minds, avoidance of harming oneself or others and love. Caring for others, especially the weak, the poor and the needy is a must in religious teaching.

---

**REFERENCE**

Adeaga, T. M and Akinleke, A. W. O (2012). *Basic Psychology Lagos: Awoset Press. Ibadan, Nigeria.*

Adeniyi, T. and Ogunsola, M. T (2010). Nature and nurture as determinants of health status among secondary school students in Atiba local government, Oyo State. *COEASU Book of Readings: A Multidisciplinary studies.* A publication of Federal College of Education Abeokuta, Nigeria. (2), 56 - 63.

Alaba, R. A. (2014). *Industrial Counseling: Ijebu-Ode. Aggress Marketing Company.* Gabi Press, Ijebu-Ode, Nigeria.

Anand, E. M. (2017). Refuse Disposal Methods and Participation among Residents in Ikot Ekpene Local Government Area of Akwa Ibom State, Nigeria. *Nigerian School Health Journal.* 12 (3); 56 - 71.

Dulin, P. L, (2016). Relationship among religious factors, social support and alcohol abuse in a western U.S college student sample. *Journal of Alcohol and Drug Education.* 50, 5-14.

Ford, E. S. (2011). Physical activity behaviours in lower and higher socioeconomic populations. *American Journal of Epidemiology.* 133; 1246-1256.

- Hunt, F. (2014). *Review of Research on Basic Education Provision in Nigeria* (Kame Akyeompong, Ricardo Sabates, Fan Hunt and Jane Anthony Centre for International Education), University of Sussex.
- Idehene, E. E., & Ojewumi, A. K. (2010). Religiosity and the preventive health behaviour. *Journal of Life Psychological*. Retrieved online at <http://readperiodicals.com/201003/19732388//.html>
- Jose, J. V. (2013). Distribution and determinants of sedentary lifestyles in European Union. *International Journal of Epidemiology*. 32; 138-146.
- Mikolajczyk, R. T. (2012). 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.
- Molarius, A. (2013). The contribution of lifestyle factors to socioeconomic differences in obesity in men and women - a population based study in Sweden. *European Journal of Epidemiology*, 18; 227-234.
- Obot, N. (2012). Effects of cultural practices on health. The Nigeria experience. A seminar work presented in the Faculty of Social Sciences University of Calabar.
- Ojua, T. A. & Omono, C. (2012). African Sacrificial ceremonies and issues in socio-cultural Development. *British Journal of Arts and Social Development*. 4 (1); 32 - 45.
- Shehu, R. A. (2005). Relationship between demographic factors and lifestyle of the people of Kaduna State, Nigeria. *Unpublished doctoral dissertation*. Ahmadu Bello University, Zaria, Nigeria.
- Tiwan, S. A. & Basal, I. (2014). A Study of Self-Concept of high and low Achievement Adolescence Girls. *India Psychology Review* 43, Special Issue, 21-25
- Wamala, S.P; Wolk, A; and Orth-Gomer. K (1997): Determinants of obesity in relation to socioeconomic status among middle - aged Swedish women. *Journal of Preventive Medicine*. 26; 734-744.
- WHO (2010). Global Health Risk; mortality and burden of disease attributable to selected major risk, Geneva: World Health Organization. Retrieved online at [http://www.who.int/healthinfo/globalburden\\_disease/global-health-risk\\_repot\\_full.pdf](http://www.who.int/healthinfo/globalburden_disease/global-health-risk_repot_full.pdf)
- Wilson I. B. & Cleary P. D. (2015). Linking clinical variables with health-related quality of life. *Journal of American Medical Association*. 1 (95); 59-65.
- World Health Organization Report. (2010). "Why do health systems matter"?. WHO. Retrieved online at [http://www.who.int/healthinfo/globalburden\\_disease/global-health-risk\\_repot\\_full.pdf](http://www.who.int/healthinfo/globalburden_disease/global-health-risk_repot_full.pdf)