AVAILABILITY OF SCHOOL HEALTH SERVICES AND PERCEIVED HEALTH STATUS OF STUDENTS IN PUBLIC BOARDING SCHOOLS IN THE FEDERAL CAPITAL TERRITORY (FCT) ABUJA

BY

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DECLARATION

I declare that the work in the theses entitled 'Availability of school Health Services and Perceived Health status of students in Public Boarding Secondary Schools of the Federal Capital Territory (FCT) Abuja' has been performed by me in the Department of Physical and Health Education (PHE) under the supervision of Prof. C.E. Dikki and Dr. (Mrs.) T.N Ogwu.

The information derived from the literature has been duly acknowledged. No part of this theses was previously presented for another degree or diploma at any University.

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CERTIFICATION

This theses entitled "AVAILABILITY OF SCHOOL HEALTH SERVICES AND PERCEIVED HEALTH STATUS OF STUDENTS IN PUBLIC BOARDING SECONDARY SCHOOLS IN THE FEDERAL CAPITAL TERRITORY (FCT) ABUJA" by Akerele, Segun Stephen meets the regulations governing the award of the degree of Master of EDUCATION IN HEALTH EDUCATION of Ahmadu Bello University (ABU) Zaira, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to God Almighty and my beloved parents Mr. Ametu Akerele of blessed memory and my mother Ozofu Juliana Akerele.

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The researcher is highly indebted to God Almighty for his unending mercies, ceaseless anointing and visible hands in all my work and undertakings in life.

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ABSTRACT

This research work "Availability of School Health Services And Perceived Health Status of Student In Public Boarding Schools of the Federal Capital Territory (FCT), Abuja" was conducted. The expost facto research design and descriptive survey (a non experimental) method of research was used. The population for the study was three hundred and seventy-five (375) respondents which was mainly on student in public boarding schools of which males and females students were randomly selected from all the eighteen (18) public boarding secondary schools across the six (6) Area councils of FCT, Abuja. The instrument used for data collection was a self structured and validated questionnaire, the demographic characteristics of the respondents were analysed using frequencies (F) and percentages (%). The research questions were analysed using mean and standard deviation. The Pearson Product Moment Correlation Co-efficient (PPMC) was used to test the hypothesis at 0.05 alpha level of significance. Based on the result of the data analysed and discussed, it could be concluded as follows: School health services are available in most of the public boarding schools in FCT, Abuja. There exist also, school health guidance and supervision team which help to monitor the health status of students. There is also periodic school inspection for environmental cleanliness and follow-up services programme that seeks to promote the health knowledge attitude and practice of student in schools. School health services which include the nutritional programmes that promote the nutritional level of students in school were equally available in schools. The following recommendations were made: Government should encourage the establishment of more school health services in schools. Conducive environment and opportunity should be given to health officers in schools to attend training programmes to improve their health knowledge. School health facilities should be monitored by the school authorities for proper use by the students.

TABLE OF CONTENTS

Title Page		i
Declaration		ii
Certification		iii
Dedication		iv
Acknowledgement s		v
Abstract		vi
Table of Contents		viii
List of tables		xi
Abbreviation		xv
CHAPTER ONE:INTRODUCTION		
1.1	Background of the study	1
1.2	Statement of the Problem	3
1.3	Research Questions	5
1.4	Purpose of the Study	6
1.5	Basic Assumptions	7
1.6	Research Hypotheses	7
1.7	Significance of the Study	9
1.8	Scope and Delimitation of the Study	10
1.9	Operational Definition of Terms	
CHAPTER TWO: REVIEW OF RELATED LITERATURE		
2.0	Review of Related Literature	12
2.1	Introduction	12
2.2	Meaning of Health	13
2.3	Origin and concept of School Health Services	15
2.4	Global View of School Health Services	18

2.5 Development of School Health Services 33
2.6 Purpose of School Health Services 40
2.7 The Provision of School Health Services 43
2.8 General Prevention and Control of Communicable and Non-communicable Diseases in Schools 45
2.9 Treatments of common ailment and first aid Services in schools 47
2.10 Health Education and Health Promotion Programme in Schools 49
2.11 The Activities of School Health Services 50
2.12 Summary 56

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction 57
3.2 The Design of the Study 57
3.3 The Population of the Study 57
3.4 Sample Size and Sampling Procedure 58
3.5 Instrument for Data Collection 60
3.6 Validity and of Instrument 61
3.7 Description of Research Instrument 62
3.8 Procedure for Data Analysis 62

CHAPTER FOUR:RESULTS AND DISCUSSION

4.1 Introduction 64
4.2 Results 64
4.3 Test of Hypothesis 78
4.4 Discussion 85

CHAPTER FIVE:SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary 90

5.2 Conclusion 92

5.3 Recommendations 93

References

Appendix

LIST OF TABLES

Table 4.2.1 -Demographic Characteristics of the Respondents 72

Table 4.2.2- Mean scores of the respondents and their current health status 73

Table 4.2.3- Means scores of the respondents on availability of health facilities 76

Table 4.2.4- Mean scores of the respondents on availability of school health guidance and supervision 78

Table 4.2.5- Mean scores of the respondents on inspection for environmental cleanliness 80

Table 4.2.6 -Mean scores of the respondents on school nutritional programmes 82

Table 4.2.7- Mean scores of the respondents on school medical examination 84

Table 4.3.1- Correlation between available health services and health status of students 86

Table 4.3.2- Correlation between available health facilities and students health status 88

Table 4.3.3- Correlation between school health guidance and supervision and students health status 89

Table 4.3.4 -Correlation between available school inspection for environmental cleanliness and health status of students 90

Table 4.3.5 -Correlation between available school nutritional programmes and students health status. 91

Table 4.3.6- Correlation between available school medical examination and students heath status. 92

OPERATIONAL DEFINITION OF TERMS

Appraisal - An assessment processes that seeks to determine the level of efficiency.

Availability : This is presence of a particular service in the school

Communicable disease - The transmission of disease from one individual to another

Counseling - A professional process of giving advice to students.

Critical illness - This is a more serious condition of ill-health that could eventually lead to death.

Curative - The process of providing care for the sick children.

Deworming - Provision of health services to reduce the quantity of worm infestation in the body system.

Endemic - An out break of disease that is often found in a particular place or among a particular group of people.

Health Status: This is regarded as the present state of health condition.

Immunization - An organize health programme that help to prevent out break of diseases.

Malnutrition - A system of feeding that lacks essential nutrients.

Morbidity - The number of birth in a particular period of time.

Mortality - The number of deaths in a particular period of time.

Pandemic - A disease condition that spread over a whole country.

Public Boarding School: This is a system of school administration where student are accommodated for proper upkeep

Public Health - Health issue that involve a large number of people in a geographical area.

School Health Services - This is an essential health or medical services provided for the school children to maintain an optimum health status.

Social Welfare - A process of providing support services for the less privilege group of people.

Sick bay - A designated health centre within a school environment for the purpose of giving medical attention to students.

Special Services - Process of dealing with specific problems.

ABREVIATIONS

A.M.A - American Medical Association

C.D.C - Centre For Disease Control

CSHP - Coordinated School Health Programme

EFA - Education For All

GSFR - Global School Feeding Report

KAP - Knowledge, Attitude and Practice

NASN - National Association Of School Nurses

N.E.A - National Education Association

N.H.P - National Health Policy

N.P.E - National Policy on Education

N.P.I - National Programme on Immunization

N.U.C - National University Commission

P.T.A - Parents Teacher Association

R.N - Registered Nurses

STDs - Sexually Transmitted Diseases

U.B.E - Universal Basic Education

W.H.O - World Health Organisation

CHAPTER ONE

1.1 Introductions

Health is acclaimed the "key to life" good health is more basic than all other essential things of life and living therefore good health must be given the first and highest priority (Edungbola, 1983). Irrespective of age school children require regular medical attention both at home and in their learning environment. Regular cases of ill-health among school children due to malnutrition, dehydration and out break of diseases have been on the increase in most parts of the world particularly in most part of developing nation like Nigeria (UNICEF, 2000).

In Nigeria half of the deaths is occuring among children in primary and post-primary schools, (National Health Policy 2006) the infections responsible for this high infant and young child death rates are diarrhea disease, which is caused by a combination of poor drinking water and poor hygiene practices. From all indications, it clearly shows that lack of sufficient health services and safe water are responsible for the high morbidity and mortality rates in Nigeria (WHO,1946).

The World Health Organization (WHO (1946) defined health as "a state of complete physical mental, and social well-being of an individual, not merely the absence of disease or infirmity". Health is much more than merely not being sick

in bed and there are levels of wellness as well as illness among individual in the society (Thuner, 1984).

Health in a holistic form is concerned with promoting the maximum physical, social, emotional, and educational growth of individuals especially children in a learning environment who deserve to have a good health education, http://www/cata.wba (2007).

Iliya (2000), observed that the entire school interest is on the school health services which encompasses various actions in conjunction with the health personnel in a learning environment to promote the highest possible level of health of the school children through out their years of study. It is very essential that school children should be physically well, mentally alert, emotionally and socially stabilized. Igwe (2000), is of the opinion that an emotional school environment that seek to promote the health of school children should encompass a healthful day, school feeding services, school safety programme, good aesthetic environment and good teacher /student relationship.

The organization of healthful school day entails conducive time which should not over stretch the teachers themselves, the provision of home grown and feeding programme of the school should be prepared in a hygienic environment and with good balance diet from a qualitative food material. Good food that is balanced will automatically build and maintain the physiological functioning of the body (Abanobi and Ewuzie, 2000).

Good aesthetic environment contributes to positive emotion to both school students and their teachers; with good design of the school building and location will provide adequate ventilation and avoid over crowding.

According to Ayodele (1995), teachers act as surrogate parents to student this is made possible when teacher strictly monitors the activities of the student. For an individual to be mentally healthy and act effectively and relate well, such an individual needs to stay in a healthy emotional environment (Okafor 1998). The teaching and learning process can only be achieved only when teachers and students dwell in a good environment.

1.2 Statement of the Problem

The health of students at all levels of education is very important to the school health services. Anderson and Creswell (1980) believed that health in the school system is an outgrowth for the general search for more effective and more enjoyable living.

School health services therefore, refer to the health care delivery system that is made available within the school primarily to promote, protect and maintain the health status of students.

The establishment of school health services if properly planned will lead to effective monitoring of the health of the students. Cases of child motility are so rampant in schools due to the prevalence of communicable and non communicable diseases in schools. The school authority has a task in ensuring

that adequate school health services are provided to students to reduce the rate of student absenteeism and truancy due to ill-health, such as: nutritional, emotional, mental, physical and psychological problems.

The achievement of good health status of school children according to Sofoluwel et al (1998), is largely dependent upon the provision of adequate school health services. School health services which cannot be given to students without the involvement of quality school health personnel helps to improve students fallen academic performance. The provision of Universal Basic Education (UBE) programme made it compulsory for most Nigerian children to attend schools which eventually increased the population explosion. Basically, the success of school children, is largely dependent on their level of mental and emotional stability. Health status of students play a significant role in the area of periodic inspection of student body to detect any health problem. The environmental cleanliness in the school by the student has alot to play in ensuring that students maintain high level of hygiene within and outside the school environment.

Ideally, it is the ultimate responsibility of the school services which is an integral part of the entire school health program to provide some clinical facilities for the correction of any physical defect of the school children. It is quite obvious that students with health problem may have difficulty in learning while in school. Ken and Mirands (2002), assert that the health knowledge, attitude and practice of students are all attributes of the availability of school health services.

This study also focuses on the management processes and the effectiveness of the available school health services in schools. It is to this end that this study is intended to find out the percentage at which the school health services help to provide to students in public boarding schools in FCT Abuja.

1.3 Research Questions

Specifically, the research study intends to address the following:

1. Does the availability of school health facilities improve the health status of students in public boarding secondary schools in FCT, Abuja?
2. Does the availability of school health guidance and supervision improve health status of students in public boarding secondary schools in FCT, Abuja?
3. Does the school health inspection for environmental cleanliness promote the health status of students in public boarding secondary schools in FCT, Abuja?
4. In what way can the school nutritional programme improve the health status of students in public boarding secondary schools in FCT, Abuja?
5. Does the school medical assessment and health observation improve the health status of students in public boarding secondary schools in FCT, Abuja?

1.4 Purpose of the Study

The purpose of this study was to find out the relationship between the availability of school health services and the health status of students in public boarding secondary schools in the Federal Capital Territory (FCT) Abuja. However, the primary concern of this research work is to achieve the following purpose:

a. To identify if the availability of school health facilities should help to improve the health status of students in public boarding secondary schools in FCT, Abuja.

b. To find out if the provision of school guidance, supervision should improve the health status of students in public boarding secondary schools in FCT, Abuja.

c. To identify if the school inspection for environmental cleanliness should help to improve the health status of students in public boarding secondary schools in FCT, Abuja.

d. To investigate if the school nutritional programmes would improve the health status of students in public boarding secondary schools in FCT, Abuja.

e. To find out if the availability of school medical assessment and observation has any positive effect on the health status of students in public boarding secondary schools in FCT, Abuja.

1.5 Basic Assumption

This research study was based on the following assumptions.

1. School health facilities are provided for students in public boarding secondary schools in F.C.T, Abuja.
2. The provision of school guidance and supervision greatly influence the health status of students in public boarding secondary schools in FCT, Abuja.
3. The school inspection for environmental cleanliness has improved the health knowledge, attitude and practice of students in public boarding secondary schools in FCT, Abuja.
4. The school nutritional programmes are provided to improve the health status of students in public boarding secondary schools in FCT, Abuja.
5. School medical assessment and observation are provided to improve the health standard of students in public boarding secondary schools in FCT, Abuja.

1.6 Research Hypothesis

The research study came up with one major and five sub-hypothesis as follows:

Major Hypothesis

There is no significant difference between the availability of school health services and the health status of students in public boarding secondary schools in FCT, Abuja.

Sub-Hypothesis

1. The availability of school health facilities does not significantly relate to the health status of students in public boarding secondary schools in FCT, Abuja.
2. The availability of school health guidance and supervision does not significantly relate to the health status of students in public secondary schools in FCT, Abuja.
3. The availability of the school inspection health for environmental cleanliness does not significantly relate to the health status of students in public boarding secondary schools in FCT, Abuja.
4. The availability of the school nutritional programmes does not significantly relate to the health status of students in public secondary schools in FCT, Abuja.
5. The availability of school medical assessment and observation does not significantly relate to the health status of students in public secondary schools in FCT, Abuja

1.7 Significance of the Study

The study was conducted on the following bases.

1. School health services are suppose to be made available in all the boarding secondary schools in the Federal Capital Territory (FCT) Abuja to monitor the health problems of students in these schools. But the nature and the extent to which these health services are provided in these schools are not actually well understood. In the final analysis, the result of this research work will show the quality and the level of school health services that is made available to the students.
2. In most cases, it is a general assumption and belief that schools that are situated in the urban areas are better provided with adequate school health services more than those secondary schools in the rural areas. The result of this study will justify if there are any significant relationship between the availability of schools health services on the health status of secondary school students in FCT Abuja. Also, the study will help the authority and other stakeholders that is concerned with providing health services to take adequate and appropriate measures to make provision for school health services in the post-primary schools of FCT, Abuja.
3. More often than not, students in boarding schools are usually well provided with school health services those in the schools, all though from all indications no accurate investigation has been made so far as regards

this, but this study will equally ascertain the level of health services that are provided in boarding secondary schools in FCT Abuja.

4. This study will bring to focus new areas that are needed for further researches that are related to school health services.

1.8 Delimitation of the Study

This study was delimited to the following:

1. Alot of factors may influence the availability of school health programmes however, only school health services were studied.
2. Only the public boarding secondary schools in the Federal Capital Territory (FCT), Abuja, where the school health services are provided were used for the study.
3. The students in the public boarding secondary schools constituted the subjects for this study.
4. All the six Area Councils in the Federal Capital Territory (FCT), Abuja constituted the research areas.

1.9 Limitations of the Study

A research of this nature is not without its limitations. However, this study was limited in the following aspects which would be taken into consideration while interpreting the results.

1. The study of all the public secondary schools in the six Area councils in the Federal Capital Territory (FCT) Abuja would have been desirable but because of the large population of the schools, the researcher made use of the simple random sampling technique to get the required population.
2. During the period of administration of the questionnaire, it was difficult for the researcher to have access to some of the students since the period coincided with their terminal examination, the researcher had to make several visit before administering and collecting the questionnaire.
3. The researcher had some difficulties in retrieving all the administered questionnaire, as some students could not fill and return the questionnaire as specified. However, only 245 out of 375 representing about (65%) questionnaire distributed to the students were returned, which now represent the sample size for a given population of 375 respondents for a total of 17,577 according to (Kereicie and Morgan 1970).
4. The researcher had difficulty in accessing the present health status of students in the various schools.

CHAPTER TWO

2.0 REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter review the related literature of school health services. In examining the relationship of the availability of school health services in public boarding secondary schools in FCT Abuja the researcher has to depend on entirely on health journals, paper presentation and other related textbooks. The related sources of information are presented in the following sub-headings thus:

- Meaning of health
- Origin of the school health services
- Concept of school health services
- Global view of school health services
- Development of school health services
- Purpose of school health services
- The provision of school health services
- General prevention and control of communicable and non-communicable diseases
- Treatment of common ailment and first aid services in school
- Health education and promotion programmme in schools
- The School health services

2.2 Meaning of Health

Health is termed to be an umbrella term that summarizes the condition in which an individual is said to be emotionally stable, mentally alert and socially well-adjusted to himself and his fellowmen (Nwanachukwu, 2000).

In order to fulfill these broad expectations, the school system has put in place some planned activities referred to as school health services. Over the years, health has been widely misconceived to mean nothing more than a situation in which an individual is neither sick nor injured. The World Health Organization (WHO, 1974) however, knows much better hence health was declared as "a state of complete physical, mental and social well-being of an individual and it is not the absence of disease or infirmity". Unfortunately, out of ignorance many people do not know the attributes of good health, let alone know how to acquire them and this is where the school health services has to come into play, the school provides all the learning experiences that positively influence the Knowledge, Attitudes and Practices (KAP) of individuals on health matters.

The school health services has been regarded as an avenue through which the health of a nations citizenry can be promoted for some specific reasons:

i. The school deals with large growing population of children who of course are regarded as the leaders of tomorrow and therefore, whatever health knowledge and practices the student imbibes while in school, influence him.

ii. Students are regarded as ambassadors of the school, they should rebuild the health knowledge and habits of their parents and the wider society through their behaviour.

Consequent upon this however, the concept of health has changed with time and social conditions. Health is described as the quality of life that enables individuals to live longest and serve best.

Anderson (1976), defined health as "the quality of physical, emotional and mental well-being which enables one to live effectively and enjoyably." Health is described as a state in which all the body organs-heart, kidneys, liver, brain etc are functioning properly and supporting each other .

Furthermore, Hochbaum (1980), viewed health as a state of being well, sound or whole in mind, body or soul, well-being especially the state of being free from physical disease or pain,; health is not however the absence of disease, but the ability to function effectively within a given environment Schhiffers, (1980). By implication, the health of the school children or individual is generally considered more than the absence of a minor or major illness; it is however a reflection of the students ability to maintain stable emotional status and also to co-exist with other people in an environment. According to Schhiffers (1997) "health is something positive, a joyful responsibilities which life places upon us.

2.3 Origin of School Health Services

School health services had its origin towards the end of the nineteenth century Kenneth (2001). The incidence of diseases as well as cases of illness during the period brought about the recognition and the importance of school health services.

Specifically, the outbreak of small pox in 1872 brought about the engagement of a sanitary superintendent by the board of education in Elmias, in San Antonia, Texas in 1990 eventually brought a routine medical inspection services to curb the frequent cases of epidemics among school children. Subsequently, it became the responsibility of social physicians to make a regular visit to schools on daily basis. This daily visit in the final analysis help to examine those children that are susceptible to communicable diseases; those students that could be eventually be interacted with any diseases were taken out of school for further medical attention.

According to Sa'adatu (2004), school health services started in 1899 after the boar war as a result of the defeat which the British soldier suffered in the hands of the South Americans. This was due to the recruitment of unhealthy soldiers that were students and were made to participate in the war. This situation eventually motivated the British government to introduce school health services in schools to further check the health status and the health standards of students.

School medical inspections were developed in large cities of the world such as Chicago in 1895, New York in 1897, and Philadelphia in 1898 Bossert

(1990) in Kenneth (2001). In another development, the first law regulating the medical inspection of school children was passed in Connecticut in the year 1899.

However, the law emphasized strictly that teachers are required to test the eyesight of their students at regular intervals. In the same vein, nurses were appointed to further strengthen the provision of school health services in most public schools in New York City in the year 1902 and in 1904. Ear, eye as well as throat examination of school children became compulsory in Vermont with the attention of Dr. Alfred Fones in 1914. While also, dental hygienists were equally involved in the examination of the students in the schools of Bridgeport, Connecticut (Kenneth, 2001).

2.4 The Concept of School Health Services

School health services are curative and preventive health services provided for the promotion of positive health status of school children and staff in a learning environment Mohammed, (2003) in Ajisafe (1980). To develop physical, mental, social, and spiritual health of students school, health services should be curative and preventive in nature. Therefore, the specific goal of school health services should be the promotion of positive health that ensure health maintenance and promotion among learners and staff. School health services should as a matter of priority place emphasis on treatment of diseases rather on preventing diseases.

The Joint committee on Health Problems in Education of the National Education Association (NEA) and the American Medical Association (AMA) view school health services as the health services provided for school children by physicians and allied health personnel in order to protect and improve the health of the school children thus aiding their growth and development and enabling them to benefit from school experience.

Nwanachukwu (2000), is of the opinion that "school health services can be utilized to provide school health care, immunization against infectious diseases, prevention and control of endemic diseases, providing appropriates treatment of common diseases and injuries, and provision of essential drugs and supply." The above assertion could be realized with the corporative activities of school teachers, physicians, dentist, nurses in order to appraise, promote, protect and maintain the health of all school students and the school personnel through:

a. An appraise of the health status of the school children and school personnel.
b. Counseling school children, parents and others about appraisal findings.
c. Encouraging the correction of remediable defects
d. Assisting in the identification and education of handicapped children.
e. Helping to prevent and control diseases.
f. Providing emergency services for injury and sudden sickness.

2.5 Global View of School Health Services

The mission of school Health Services programme in the developed countries is to appraise, protect and promote the health of the students. Preventive and emergency school based health services are provided in accordance with a local school health services which is jointly developed by the country's health department, school district and school health advisory committee. School based health services are an important component of the public health system which help to assure that the students are healthy in the classroom and are ready to learn. School nurses enhance health within the school and community by providing health appraisals, nursing assessments, nutrition assessment, providing dental services, periodic health screenings, health counselling referral and follow-up of suspected or confirmed health programs, emergency health services, and promoting activities to reduce risk-taking behaviours. School nurses also collaborate with parents, teachers, social workers and other health care providers to develop care plans, identify the need for health referrals, to address specific health problems that are discovered through periodic health screenings and assessments.

Components of School Health Services

Benjamin Frank (2007), asserted that developed countries of the world, there are some basic components of school health services they are:

- **Curative**: Providing care for the sick children.

- **Preventive**: for the protection of the health of the school children.
- **Special services**: Dealing with specific problems e.g. malnutrition or specific groups e.g. pregnant women.
- **Social welfare:** Providing support services for the disadvantage groups e.g. chronic sick, mentally and physically handicapped orphans etc.
- **Health education**: Giving the people essential information to modify their behaviour in matters affecting their health.

However, the above classification can be used as a simple check-list for reviewing the health services in any community and other learning environment.

Basic Schools Health Services

In United States of America (USA), Basic School Health Services Act S.381.0056 F.S. are provided to all Florida public school students. Basic services include health record reviews, follow-up for mandated school entry, physical examinations and appropriate level of immunization against preventable communicable diseases, screenings for health conditions that can directly affect student learning ability (Vision, hearing, growth and development of scoliosis). First aid and medication assistance, and emergency health services. (American Journal of School Health, 2008).

Comprehensive School Health Services Projects

In addition to all basic school health services, comprehensive school services in most countries provide services in accordance with S581.0057, F.S. These services include students health management, interventions and classes to

reduce risk-taking behaviours, violence and injury prevention, and services to reduce teen pregnancy and promote return to school after giving birth. Comprehensive school health services provide more in-depth health management through the increased use of registered nurses (RN) for assessments, interventions, case management and improving assess to health care through family physicians.

Full School Health Service

Full school service projects are located in almost about 67 countries of the developed world. Since 1990, this program has provided the infrastructure necessary to co-ordinate and deliver services donated by community. This program is authorized by S. 402.3026.F.S. and focuses on students and communities that need access to medical and social services. In Florida for instance, full school health services are provided to schools in addition to the coordination of medical and specialized social services such as: nutritional services, economic and job placement services, counseling for abused children, mental health and substance abuse counseling (American Journal of School Health, 2008).

Volunteer School Nurse Program

The volunteer school nurse program was initiated to recruit retired non-working nurses who might otherwise not enter the workforce. Volunteers supplement the health services provided by paid school health staff. The

programme presently in 2008 encompasses 10 projects in about 11 countries in the developed world.

Section 110. FS provide continuing education classes through the health departments; orientation and training programmes are provided to ensure that volunteers practice in accordance with school health policies and procedures and adhere to standards of practice. During 2006 – 2007, volunteer nurses provided over 22, 245 hours of service to the school children in the 11 countries with a return investment of $885.519 (American School Health Journal, 2008).

Coordinated School Health Program

This is a joint commitment between the Florida Department of Education Founded by the Centres for disease control and prevention, to cooperate in the development and provision of school health systems that designed to provide a coordinated approach to the delivery of educational and health services to meet the diverse needs of Florida's youth. The Coordinated School health Program (CSHP) model consists of eight interactive components.

- Health Education
- Health Services
- Family and community involvement
- Environmental health
- Nutrition services
- Psychological and social services
- Health promotion and

- Physical Education.

However, the strength of the model is that when fully implemented, schools are better prepared to help children and their families to prevent or reduce behaviours that contribute to health problems.

School nurses in most developed countries of the world provide a range of preventive health services in the public schools. Many students come to school with health needs that may interfere with their ability to learn and reach their full potential. For instance, infections, injuries, asthma, diabetes, and emotional difficulties related to these health conditions may lead to absence from school and in some cases, academic failure if left unattended or not addressed properly; the nurses ensure that students are healthy, safe and prepared to learn. According to the National Association of School Nurse (NASN, 2000), the role of the school nurse is to advance the well being, academic success and life-long achievement of students. Against this background therefore, the school nurse facilitate positive student responses to normal development, promote health and safety intervene in health problems and actively collaborate with others to build student and family capacity for adaption, self management self-advocacy and learning. Every child deserves a school nurse (American Journal of School health Services, 2008).

The Goal of School Health Services

The overall goal of the provision of School Health Services is to strengthen and facilitate the educational process by improving and protecting the health status of children and staff. Parents/guardians, child care workers, and educational professional know that the health and intellectual development of children are related and for this reason, the need for nursing services in schools has been recognized since the early twentieth century. Government of most countries in developed and developing world has accordingly required services to prevent the spread of infection diseases, to detect developmental problems, and to assist students who become ill or injured. In New Jersey for example, laws concerning School Health Services were first enacted in 1903 (American Journal of School Health Services, 2008). Subsequently, certain health services are mandated by the government because they are necessary either to protect the public health or to support the continuing participation of children in school. For instance, screening students for current immunization helps to reduce absenteeism due to illness. In the same vein, screening for reduced vision or hearing identifies the need for equipment to remove obstacles to learning. School Health Services provide physical and emotional support so that children can better cope with periodic illness and injury; schools also provide daily support to students with chronic health needs in order to participate in educational activities. In modern school, health services contribute significantly to the total school climate which enhances the day-to-day functioning of students and staff.

Over the years, health problems among school children in the world over is expressed in the following statistics according to UNICEF(1989).

Malnutrition is estimated to be associated with over half of all child deaths in developing countries.

- Worm infections are the greatest cause of disease among 5 – 14 year old children.
- Vitamin A deficiency is the single greatest cause of preventable childhood blindness. Mild vitamin A deficiency causes impaired immune function which makes young people more susceptible to other infectious diseases.
- Iodine deficiency is the single most common preventable cause of mental retardation and brain damage in children.
- Approximately 700.000 children die of malaria each year.
- Injury among school children is the leading cause of death and disability among school-age-youth.
- Each year more than half of all new HIV infections occur in young people under 25; more than two-thirds of all reported STDs infections occur among this group in developing countries.
- Pregnancy – related complications are the main cause of death for 15 – 19 year old girls' world wide.
- One out of two young people who start and continue to smoke will die from tobacco-related illness.

- World wide, about 5% of all deaths of young people between the ages of 15 and 29 are attributed to alcohol use.

In view of the above health related problems according to UNICEF (1989), accumulated experience has shown all over the world that government and other health related agencies must work together to prevent and treat health problems that is capable of destroying young lives and undermine the public investment in education. In fact, from all indications, many of the common conditions of ill health among school children can be managed effectively, simply and inexpensively through school-based health and nutrition programs, this is because school authority now have access to the target group and also the school-based health and nutrition program take advantage of the existing skilled health personnel including the teachers and administrators that is already engaged with the community to provide school health services. It is quite obvious that schools are particularly effective sites for health services because of their unique ability to promote health on several instances.

The International Conference on Education For All (EFA) in 2000 courtesy of (UNESCO, UNICEF, WHO and the World Bank) and other experts in the field of School Health emphasized some number of variables which schools can influence to improve the conditions of school children. The variables states that:

Where a significant proportion of the student's body suffers from one or more micronutrient deficiencies, schools can provide supplements. At the same time, school can diagnoses and treat worm infections. The school can provide

clean water and appropriate sanitation facilities to reduce the incidence of parasite infection/re-infection, and they can teach children to wash their hands before and after defecating. Schools can help sexually-active youth reduce their risk of infection with HIV by providing condoms, or referring students to locations where condoms are available. But without the knowledge, attitudes and skills a young person must acquire to consistently practice safer sex, young people are notoriously unlikely to use condoms. Also the school can provide the skills-based health education that young people need to adopt and maintain safer behaviours subsequently, school feeding has significant potential benefits; it can improve students' nutritional status, reduce short-term hunger and associated learning deficits and bring more children to school. Though, infection with parasites usually undermines the nutritional benefit and nothing is achieved if students are absent from school due to illness or if parents keep them at home because of fear of their safety at en route to school. To ensure that school feeding activities are maximally effective, schools can add deworming services, they can provide clean water and appropriate sanitation facilities, and they can develop and enforce policies guaranteeing a safe and secure school environment.

Children's success at school and in life depends on their mental and emotional health. The schools can play a primary role in three areas; prevention, detection and management of children's health by creating a space where violence and abuse is openly condemned.

Finally, as students become healthier, they participate more fully in educational opportunities, and the whole community start to see the school and school personnel in a more positive light. This positive reaction to school based health services is well established. In particular, micronutrient supplementation, deworming, malaria treatments and school feeding programs have been perceived as a substantial benefit of schooling and thus improved enrolment and attendance (Education for All EFA, 2000).

Poor knowledge level of HIV/AIDS pandemic and other related diseases such as the Sexually Transmitted Diseases (STDs) like gonorrhea, syphilis, etc. among school children are major health problems of most school children (WHO, 1995).

There are frequent cases of accidents in the school environment due to lack of safety and health education while in the playing ground also, primary and post-primary school students are more susceptible to frequent accidents than adults (Verhulst, 1998; Schhiffers, 1997; and Edith, 1998).

According to the food and Drugs Act of 1974, there is frequent problem of food hygiene in most of our schools due to little or no health awareness by the food vendors. The problem of malnutrition among school children as a result of insufficient intake of calories and inadequate consumption of proteinous food are problems facing the nutritional level of most school children this is an observation made by the Global School Feeding Report (G.S.F.R, 2004).

In the same vein, poor sanitary practices and environmental issues due to lack of effective health education poses alot of health problems to school children as opined by (Obionu, 2001).

The entire school system in our society is characterized by so much physical, moral, social inequality, injustice and corruption which prevent school children from poor homes to have access to good health care. In the words of John Gardener former secretary of the US Department of Health Education and Welfare: "Over the centuries, the classic question of social reform has been 'How can we cure this or that specific ill?" (Verhulst, 1998).

School health services in most of our nation's schools has been so poor and this however pose a significant threat to all sectors of the national economy. Illiya (2001) asserted that many children are being afflicted with communicable diseases such as: Measles, cholera, diarrhea, typhoid fever etc which leave most of the students with no other option than to drop out of school in the final analysis.

Many Nigerian school children in the post-primary schools are suffering from physical, psychological and social pains as a result of inadequate school health services. Poor quality of health teachers in most public schools is also a major problem; the inexperience health teachers are not capable of promoting good school health living.

Kayode (2004), observed that the prevalence of diseases in most of the school environment are a major global threat to the health, prosperity, social

stability and security of individual which could account for millions of death if adequate care is not taken against such diseases.

School students are faced with a lot of emotional problems such as stress, lack of concentration etc. which can arise as a result of poor school climate and which eventually affect their learning processes Stainmann (1998) observed that a student that is emotionally unstable will have difficulty in learning.

The school system is characterized by so much physical and moral poverty, social inequality, injustices, corruption and many other problems (Okapor, 2000).

Igwe, (2000), Imoge (1987), Okafor, (1991) reported large scale deficiencies in the provision of school health services in secondary schools. With the present administration commitment to promote good quality of education to Nigerian students, the introduction of the Universal Basic Education (UBE) Scheme of 2000 of the Federal Republic of Nigeria is a good step in the right direction. The scheme provides for 9 years 6 years of primary and 3 years of secondary of compulsory and quality education for all Nigerian children.

For instance in Nigeria, a high priority has subsequently been given to health services for the general citizen by the government. Over the years, huge sums of money are allocated to the health sector; this is to combat childhood diseases. However, the effort of National Programme on Immunization (NPI) against deadly communicable diseases is funded by the national government. The national government's recognition of children is understandable because they regarded children of today as the adult of tomorrow and also, regarded healthy

children to be an asset to the nation. It has been an obvious observation that most of the school children are of primary and secondary age, and many of them have no access to school UNICEF (2004), it is therefore a good idea for the Nigerian Government to make specific provisions for school health services in all schools in the federation as it is contained in its policy document (Federal Republic of Nigeria, FRN, 1998).

School health services according to Amos et al., (2005), refers to the health care delivery system that is available within a school or college; the services aim at promoting and maintaining the health of school children so as to give a good start in life. In addition, the health services seek to enable children benefit optimally from their school learning experiences. The status of school health services to a large extent is determined through an examination of the health services that are provided. According to Brooks (1979) it is the responsibility of the school health teacher and other health professionals within the community and in a learning environment to promote the health of the school children this assertion was made by Adegbite (1990). Diseases are a major global threat to the health prosperity, social stability and security of individuals which could account for millions of death if adequate care is not taken against such diseases James (2002). Most communicable diseases are with the school children because they are often exposed to a lot of health hazards in the learning environment, therefore, health education should be an instrument in the prevention of diseases and promoting good health. The Journal of Community Medicine (2007)

subsequently emphasized the active involvement of school health teachers and other health personnel in a well planned school health services . The establishment of school health service will eventually lead to an improvement in personal hygiene among school children and subsequent reduction in related morbidity since most of the cases of morbidities and mortality in our community are due to communicable diseases most of which can be prevented or readily treated. Most of our learning environment is plagued with infections and parasitic diseases due to poor health habits and poor sanitation practices which remains the leading course of morbidity and mortality in most developing nations of the world (Park, 2000).

More often, school children are susceptible to environmentally related diseases such as malaria, typhoid fever, diarrhea, measles etc they are a constant threat to life as opined by Lucas and Gilles (1990)

Health education teacher, school nurse, nutritionists, dentists, medical doctor ensure that school children have adequate assess to health facilities and maintain high standard of healthful school living within the learning environment.

In promoting the health of the school children through the availability of school health services, the following attribute are very essential such as periodic inspection of school children, height and weight measurement, inspection of hair, nails, teeth, the general examination of the skin for rashes, ulcers and ring worms, examination of the eyes, ears, nose and throat for infections, visual testing to

detect children that need attention as well as auditory testing to measure hearing ability of children all those are school health services. To further ensure perfect health of the school children, a radiological examination of the chest is essential coupled with dental examination (dental decay) all these attributes will improve health status of students in any learning environment has many aids and opportunities for health maintenance and health improvement provides emergency care incase of accident or sudden illness; the health services assesses health status through regular information supplied by the family physician. Further aid to students health promotion is the school physical education programme, this noble objective is achievable through the provision of a healthy environment and assistance in solving students problem in relation to food, housing and recreation (Linda, 2001).

The health status of school children is closely monitored and developed by the school physicians such as: nurses, dietician, physical educators, health educators and school coaches as well as teachers, school guidance and counselors all of these are resources in developing physical, mental and social well-being of the school children.

The process of providing learning experiences which favourably influence understanding, attitudes and conducts with regards to individual and community health is regarded as Health Education as opined by (Edungbola,1983).

The World Health Organization WHO (1995), viewed Health Education as that part of health programmes which consists of planned attempts to change

individuals, groups and community behaviours with the aim of helping to achieve curative, preventive, rehabilitative and promotion of health. Health Education in schools should provide a systematic program for the development of desirable habits, attitudes, concepts, as well as knowledge of individual and community health; Health Education provide a variety of learning experiences through classroom discussion and problem solving activities.

2.6 Development of School Health Services

Numerous public health initiatives have promoted the development of school health since the American era. In fact, Benjamin Frank (2007), advocated a "healthful situation" that promotes physical exercise during the school hour. However, prior to the mid-1800s, efforts to introduce school health programme into the schools were isolated. It was not until 1840 Rhode Island passed the first legislation to make health education mandatory and other states soon adopted this concept of comprehensive school health services.

This background led to school program receiving major attention as a means to promote public health and prevent disease. In 1970's most government in developed countries had started implementing health education programmes in most public schools. One of the earliest health care programs was in Asia which was established at Kalatura Ceylon in 1926; the main focus of the establishment was the care of infants, pre-school and school children, control of communicable diseases and health education. These services were not without the support of the

Rock feller foundation. In 1975 precisely, there was a great nutritional and health status of school children; the school have feeding program which mapped out some action plans in solving and managing the health problems of school children. However, School Health Services is aimed at covering community health problems, health education strategies, socio-religious aspect of health, mother and child health, first aid, nutritional and identification and treatment of communicable and highly prevalent diseases.

In Africa, the failure of school health services to meet up with the health status of school children is a major problem; the quantity and quality of the health teachers in relation to the existing health situation in most schools is very poor. Most African countries, have not been able to provide adequate healthful environment and assistance in varying degrees in solving problems such as: food, housing, recreation, and personal problems. A successful school health programme is considered in a four dimensional perspectives viz: health service, health instruction, healthful school living and relationship in the community setting these four dimensional ways was opined by (Norman, 1972, Adegbite, 1990). Against this background however, it has become very essential to consider the School Health Services as a very important tool in promoting the health of the school children and to achieve this target, it is the major responsibility of the school health teacher and other health professionals within the community and in a learning environment to promote the health status of the school children this assertion was made by Adegbite (1990).

Most communicable diseases are with the school children because they are exposed to a lot of health hazards in the learning environment, hence health education is instrumental in the prevention of diseases.

Alexandra (1990) remarked that "Most of the morbidity and mortality in our community are due to communicable diseases, most of which can be prevented or readily treated such as malaria, dysentery, pneumonia, tetanus, tuberculosis, cholera and others" and with the active involvement of school health teachers in a well planned school health services, it will eventually lead to improvement in personal hygiene in school children and subsequent reduction in related morbidities, (Journal of Community Medicine 2007).

According to Park (2000), most of our learning environment are plagued with infections and parasitic diseases due to poor health habits and poor sanitation system which usually the course of morbidity and mortality in many developing countries most of the school children environmentally related disease such as malaria, typhoid, diarrhea and dysentery are a constant threat to life as opined by (Lucas and Gilles, 2003).

Lack of good portable drinking water supply and poor environmental sanitation in the school environment are the reasons why diseases associated with un-hygienic disposal of students feaces and refuse due to lack of good health education program in schools are very common in the learning environment. The most important incidence of disease as a result of poor environment include

diarrhea and intestinal worm infections which account for over 10% of the total disease in most of our learning environment (WHO. 2005).

More importantly, inadequate supply of portable water increase the risk of schistosomiasis, guinea worm and skin infections Park, (2000). The environmentally related diseases can be controlled and prevented through good health promotion and improved environmental sanitation in the society. Ugbonnaya (2000), remarked that proper and well planned school health promotion/health education program is usually aimed at increasing the students' ability to withstand any stress in the learning environment especially through good nutrition and health education.

An improved health standard of school children should not based entirely on curative services but also acquiring scientific facts hence Tons (1988), opined that in any health scheme, there should be provision of social and basic knowledge of science of hygiene, which would enable people to live in harmony with their environments, this could be accomplished through health education. In other words, with series of school health services, students will learn the good habit of keeping their environment clean and tidy and also observed some good health rules of preventive medicine.

To achieve a comprehensive study of the health of student's it is very essential to view health in an indepth perspective by categorizing the concept of health into five different aspects, this assertion is supported by Willgoose (1994) and Adegbite (1990) as they grouped peoples health into different level viz:

- Health: This is the level at which an individuals has full desirable potentials
- Wellness: This is a level of health that ranges from low to high level of wellness.
- Minor illness: This is regarded as milder illness and other disabilities.
- Major illness: This is an illness of a more disabilities.
- Critical illness: This is a more serious condition of ill-health that could eventually lead to death.

Adegbite (1990), further remarked that the fourth and fifth level of health could likely prevent students from attending school and that those group of students that could function very well in the learning environment are those students in the first to the third level of health status.

It is very obvious that during the early stage of students life the school has a great task in making a positive contribution to the health of school children and this task can be made realistic through school health services which will assist the student to protect and also improve their health status.

In another development, a good school health services aids students in selecting and maintaining a life style that would give a better life as well as better society; regular inspection of students in the school assembly ground is usually a good step in the right direction as opined by Dorathy (2002), inspection of school children while in the assembly ground is to ensure that students at all time attain a good standard of personal cleanliness.

Since the health needs of the ever growing school child are specific and it takes a joint effort of the parents, the school and the entire community to ensure that the health of the school children is not eventually jeopardize. It is against this backdrop that the National Health Policy (NHP, 2006) in Nigeria, recognizes the value of school health services and therefore makes provision for this under the Primary health Care Program (UNICEF, 1989).

In the same vein, the Sa,adatu (2004) emphasized the relationship between formal education and health education program in schools by stating that *"Government has also stated the benefit of all citizens, the country's educational goals in terms of its relevance to the needs of the individual as well as in terms of the kind of society desired in relation to the environment and the realities of the modern world and rapid social changes should be clearly set out."* In other words, the policy has subsequently recognized the relevance of school health services as it is in a formal education system in the country's educational policy.

The school health service will strive very well in an atmosphere that is devoid of ill-health Ikeh (1986) supported that to be truly healthy, a person should enjoy a balanced relationship of the body and mind and complete adjustment to the environment." He goes further to emphasis on the physical surroundings of land, the school building outlay, individuals in the environment, learning equipments, air, the virus bacteria and often organising all these components made up a learning environment.

A comprehensive school health service cannot be disseminated to students in a vacuum it must be supported by suitable practical activities for the students to have a full benefit of the day this observation was made by (Alakijah, 1986). A functional school health service should integrate all other practically oriented activities that can bring about a healthy student that could also cope with academic activities mentally and otherwise.

2.7 Purpose of School Health Services

The purpose of providing school health services in a learning environment cannot be over emphasized for school children to attain a maximum health standards, the following purpose has to be accomplished.

1. The School Health Services if carefully implemented and monitored will help to promote the maximum physical, social, emotional and education growth of school children by providing a school site, direct health services, health education consultation room.
2. The School Health Services will help to improve students academic achievement by intensifying School Health Services through the school nurse. Expansion of the entire School Health Services components can also help in applying individualized interventions at identified health conditions or issues.

3. The availability of the School Health Services, will further assist the school health officer to assess the following areas: vision, hearing, date of last check up, eating habits, bed time/sleep habits as well as over all school attendance. While the School Health Services are operational in a learning environment, some specific areas may need to be addressed and adequate health information will be provided to the student therefore, all of these areas have a significant impact on a child's over all academic achievement.
4. The provision of the school service will further assist the school health officer to identify pregnant and/or parenting teens and provide professional counseling services as well as track down their attendance in order to help decrease the number of days of school missed and also help to address issues that might keep them from completing high school.
5. The establishment of any school health program is primarily to implement a comprehensive school health services as defined by the Centres for Disease Control. (CDC, 2000).
6. The School Health Services in a learning environment will help families to recognize health routine, preventive health an dental care of their children which is important to achieving the best degree of health and wellness of the children.
7. The School Health Services will enable the school health officer to identify students without a medical or dental provider; the school health officer will help the families of these students and remind them of the importance of a

healthy child and care for children as well as helping to link these families with available resources as needed. School Health and physical education with school curriculum has both health and educational objectives as observed by (Brooks, 1979).

The primary aim of school health and physical education include:

- To aid the student in developing physical strength and endurance.
- To establish habits of regular exercise.
- To help the student to develop special skills and coordination that will enable the individual to use his or her body to the best advantage.
- To contribute to mental health, personality, and character, and
- To provide relaxation during the school day.

The school health officer will usually plan a combination of health activities that will be adopted to the needs and interests of the school child at each age and grade level. In a nutshell, the School Health Services department plays a significant role to the health status of secondary school across the learning environment in a contemporary society. For instance, the department provides nursing and medical services, communicable disease control, and sanitary supervision on most public schools.

In another development, the School Health Services has the ultimate responsibility of providing some clinical facilities for the correction of physical abnormalities and sends professionals into the schools for tuberculin testing, immunization, vaccination etc.

In the final analysis, the provision of School Health Services in public school has the obvious aim of raising the general standard of healthful school living, in developing an appreciation of public health services and also in developing community support for special routine immunization programs and other health measures.

2.8 The Provision of School Health Services

With the introduction of the school home grown and feeding system initiated by the Universal Basic Education (UBE) (2000), under the administration of Chief Olusegun Obasanjo is a further step in the right direction in its commitment to the provision of qualitative and functional health education for the students. The high capital investment in the UBE feeding program is evidence of government's recognition and determination of its responsibility towards the health status of school children.

However, the future of health education teacher is directly connected to the entire country regarding the health knowledge, attitude and practices. The primary aim of health education that is usually provided by the school health teacher and other health personnel is for the achievement of good health status among school children as well as school staff.

There should however be a concerned effort to improve the teaching profession which is imperative in achieving the laudable objectives by the

National policy on Education (1981), and this goal could be achieved by ensuring good training of health personnel. Subsequently, working conditions of a School Health officer is improved substantially in the learning environment. For instance, the teaching and learning environment must be improved, first Aid box, good toilet system and other health facilities in the school environment equally need to be improved.

Above all, all health facilities and services that impact on effective learning and teaching in other to improve the health status of the students should be put in place, the deplorable condition of the classrooms in most of the public schools across the nation is a major impediment towards effective implementation of a good and standard School Health Services.

It is against this backdrop however, that the National Universities Commission (NUC, 2002) emphasized on the greatest challenges to the attainment of the production of sufficient qualified and professionally trained health teachers as well as other medical health personals that could function well in the school environment.

The health needs of a growing child are specific and it takes a good and joint effort of the parents, the school and the entire community to make sure that the health of school child is not completely jeopardized. However, the National Health Policy in Nigeria has over the years take into cognisance the value of school health services hence, the government subsequently makes adequate provision under the Primary Health care program (PHC, 1988) to bring to the

door step adequate and comprehensive health care system to the school system of any community (UNICEF, 1989).

It is an obvious fact that good health of any school child is ideal for productive and efficient school work by students. It is often very difficult to learn perfectly without good health in all ramifications; the whole school health programs in this context has three major divisions or components such as healthful school environment, school health combinations to make a whole school health programs to function properly in an ideal situation.

It is very essential that school like any other health organization should have a duty to provide a physical and social environment that is conducive to the student as opined by Tones Keith (1988). The provision of physical and social environment is not only made possible alone but coupled with the responsibility of identifying the health education components. In the same vein, the school authority should be assisted to realize the over all health goals by the active co-operation from policy makers, the parents as well as the community at large.

2.9 General Prevention and Control of Communicable and Non-Communicable Diseases.

The prevention and control of communicable and non-communicable diseases is an essential aspect of health promotion activities. Obionu (2001), opined that immunization against common diseases can be carried out in schools and measures to control spread of infectious diseases include routine screening of

school children. The school environment is frequently conducive to the transmission of most communicable diseases and the control of communicable diseases in Nigerian schools is the absolute function of public health department of the Ministry of Health.

School children with health problems such as vision and hearing deficiencies, malnutrition, dental pains, emotional disturbances, skin infections and other related diseases have been identified in schools. Kayode (2004), asserts that good health is very important for school children. Children with emotional problems may have trouble in learning to read. For example, malnutrition or lack of breakfast will discourage concentration and cause insufficient stamina to endure classroom activities. In the same vein, the measure of control of communicable and non communicable diseases will depend to a large extent an individual effort. The basic principles of control of communicable diseases in schools should include:

a. Early detection and diagnosis of communicable diseases within the school community.
b. Isolation of infected children.
c. Notification of health authorities which is important for the following reasons.
    i. To confirm the diagnosis for instance, not all skin rashes are infectious.
    ii. To treat the infected school children.

iii. Trace, examine and treat other students who had been in close contact with the infected children.

iv. Institute other measures designed to curtail the infection.

v. Fumigate the school compound.

d. Immunization of children.

e. Promotion of good environmental sanitation within the school.

Igwe (2000), further emphasis that the health of the staff directly affects the health of the students. Therefore, it is very essential to promote and protect the health of teaching and non-teaching staff in a school environment.

Communicable diseases prevention and control should be included in school health services this is the opinion of Bucher (1979). According to them, this aspect of school health services should be co-ordinated by the school. More importantly, measures such as isolating the child suspected of having a contagious disease, educating the parents to take advantage of immunization and other preventive measures, informing the school health department of suspected cases of communicable diseases, encouraging sick children, teachers and non-teaching staff to stay at home and treat the causes of the development and spread of diseases.

2.10 Treatment of Common Ailment and First Aid Services in Schools

Treatment and first aid service for minor injuries can be given through a school nurse or competent school health personnel. Obionu (2001), is of the

opinion that there should be a simple equipped first aid box and a trained individual to be able to make use of the first aid box and at the same time a seminar on the use of first aid should be organized for teachers and the students.

In another development, Igwe (1996), subsequently advocated that every school should have a comprehensive health programme concerning treatment of emergency cases within the school environment since it is assume that every classroom teacher is a potential first aider by virtue of the training that has been given. He said that the training on emergencies cases will go along way in promoting and protecting the health of the school children. He further asserted that the school has a responsibility in place of parents in providing emergency care for school children in the event of accidents or illness until the services of a physician are required.

The most important causes of absenteeism from school is primarily due to children spending considerable length of time in school clinics and hospitals for diseases and injuries that could been effectively treated at school this was an observation made by (Ademuwagunn and Oduntan 1986).

In view of the above observation, they are of the opinion that a room in the school should be set aside as a school health room where treatment of minor injuries could be carried out and a bed space should be provided for students to have a bed rest before referral will be made to an hospital for the commencement of further medical treatment. They further maintained that current contact name

and office addresses as well as telephone numbers of parents should be kept in the school record books and made available in case of emergencies.

Sofoluwe et al., (1998), added that record keeping in school is a good foundation towards maintaining a good health status of school children. They suggested that proper registration of defects such as visual defects, hearing, impairment, cases of epilepsy, asthmatic attacks, emotional, social and psychological traumatic cases, mental illness and all other health problems of students will help to direct attention to those children who require medical attention.

2.11 Health Education and Health Promotion Programme in Schools

According to Ejifugha (1999), it has become very essential to recognize the establishment of health education and promotion in schools. He emphasized that the need for health education and promotion activities is more urgent especially with 20th century which witnessed an unprecedented increase in crime rate due to drug addiction, prostitution, over population, environmental pollution and all the likes.

However, all these social problems in the society due to lack of proper health education need fundamental care therefore she asserted that health education and promotion should be an integral aspect of the school curriculum for every level of academic development.

In another development Brooks and Brooks (1979,) opined that proper health promotion for school children which should include planned programme of physical activities required suitable play ground, gymnasiums and play rooms in suitable locations should be encouraged. They upheld that health education in schools should provide a systematic programme for the development of desirable habits, attitudes, concepts and health knowledge in the field of individual and community health.

School administrators, nurses, physicians, dentists, dental hygienist, psychologists, school councilors, social workers, nutritionist and other professionals in the field of health should work cooperatively with parents and the entire community to achieve the common goal of providing school children and adolescents with health promotion programmes and enabling environment that is capable of promoting health and improve teaching and learning (Dorothy et al., 2002).

In a related development, Ken and Mirands (2002) maintained that desirable physical activity should be made available for school children since it is an avenue for providing desirable health related behaviour for the school children. Lucas and Gilles (2003) advocated that health education programme at school is to make the children value health in high esteem.

2.12 The School Health Services

These are school health services that constitutes those school activities that has direct concerns about the health status of the school child and the entire research works is centred in this forum. The School Health Services is made of three aspects to be discussed that is, the appraisal, follow-up services, communicable disease control and prevention, emergency care for injuries and sudden illness and health of school personnel. According to Amos (2001), the School Health Services is the complete evaluation of each school child's health by the school health workers and the health teacher to ensure a maximum health status of the student.

The School Health Services that is rendered by the school teacher and other members of staff are usually invited by the school authority with the ultimate aim of improving, maintaining and protecting the health of the student.

Anderson and Creswell (1976) emphasized that School Health Services encompasses health appraisal, health guidance, supervision, prevention and control of communicable diseases. The School Health Services create an enabling opportunity for the school teacher and the students to establish a personal contact not only with the health personnel but also with the health facilities. A comprehensive school health components vis-a-vis school health promotion activities of students include the following:

i. **Health Appraisal**

According to the report of WHO (1995) and Adegbite (1990) the health appraisal is the most vital aspect of school health services which determines to a large extent the health status of students in the learning environment.

The ultimate goal of the school health appraisal program is the improvement and maintenance of the student's health. In an ideal practical situation therefore, each school should have a comprehensive health team comprising of the school or clinic nurse.

- The visiting physician
- Health teachers/counsellors
- The health prefect
- Representative of the PTA preferably those with a health/administrative background and
- A health personnel from the Local Government Area.

ii. **Health Examination**

The over all health examination of school children determines to a large extent the fitness of the student to be able to participate actively in the school activities. More often than not, the health examination is conducted by a visiting doctor or the school nurse as the case may be. In some cases, the school admission procedure may require each student to bring a medical report as regards general health, blood group, x-ray results, ear and eye tests. This will form the basis on which the students' health will continuously monitored all this

will help the student to be able to participate and function very well in any athletes and academic activities.

The health examination of student in some cases include the laboratory tests such as student blood group, heamoglobin level in order to determine anaemia, urine test is also important to detect diabetes. While on the other hand the stool test to detect worm manifestation; sputum test to affirm absence of tuberculosis and finally, chest x-ray is to detect absence of tuberculosis or any defect as it is supported by(Lucas, and Gilles, 1990).

A comprehensive health examination in a learning environment will include in addition to the above medical examination a medical history, general appearance, height and weight (to find out the nutritional status) head, neck, nose and throat, skin, muscular and skeletal systems, posture, and neurological system.

iii. **Dental Examination**

This is an essential health services in any school health program. Dental cavities are mostly common in students because of the students love for chocolates (hard carbohydrates). If any dental disease such as (periodontal disease) not properly treated may likely lead to abscess resulting in acute pain and loss of school days on the part of the students (absentees in school). Therefore, in order to forstall the possibility of any dental problem in the school environment, authority should give a periodical dental advice and also to guide against bad mouth odour all these will be detected and treated in earnest.

iv. **Hearing Tests**

This test is used mainly in schools to detect any hearing problem and students with this problem are subsequently identified quite early by the class teacher. Early detection of hearing impairment in a student by the school teacher requires skill observation by the teacher in a learning environment.

v. **Vision Screening Tests**

This type of test is done to identify students who are likely to need a more thorough examination mainly in schools to detect eye problems.

vi. **Height and Weight Measures**

Each student in a learning environment needs a height and weight record; a student who is loosing weight or who appears lean has to be counseled and given follow-up services.

vii. **Health Assessment and Observation by the Health Teacher**

The close association of school teacher and the student will help the teacher to detect any health problems in the student. Teachers are regarded as change agents according to Ekeh and Adeniyi (1986) and the assessment and observation of students may be the only yard stick to be used for the students' assessment especially those students in a boarding institution. Through the constant assessment and observations of students, sick children are detected early enough and appropriate referral is made. Also, handicapped children are to be

given special attention, while in the school environment, any student noticed not participating well enough during physical activities may need a medical attention and any student or teacher with bad cold or any infections disease should be isolated or stay at home or in the sick bay (in the case of boarders) for medical attention until symptom subsides.

viii. **Inspection of Cleanliness**

The school teachers has the absolute responsibility to inspect the students of their personal hygiene. However, Alakijah (1986), is of the opinion that the students need to have their teeth, skin, nails feet and clothing inspected. The cleanliness of the students determine their health standard any negligible action may adversely affect the health of the students, the environment too may affect the health of the students therefore, particular attention should be paid to leaking pipes, toilet conditions and the cleanliness of the classrooms and school compound.

ix. **Health Guidance and Supervision**

The teacher who is equally regarded as an health educator guides the students in various ways as well as student-teacher relationship will help the students to develop confidence in their teachers who will make the burden of their health problems higher. According to Keith (1988) the school teacher should always act as a counselor and a confidant, and create a non-threatening

environment in which effective communication between him and the students could be natural.

x. **Follow-Up Service**

A counseled students should be followed up by the school authorities or health personnel this is to make sure that the student health has been regained and also, the attitudes and behaviour of such students is towards positive and better health. Reports about the student's health should be written and kept in the student's file for reference purposes.

2.13 Summary

This chapter critically examined the relationship of the availability of school heath services to the health status of students in public boarding secondary schools in the Federal Capital Territory (FCT) Abuja.

A brief history of the origin of school health services as well as development of school heath services were examined.

The component of school health services which include: the health appraisal, health examination, dental examination, hearing and vision screening text, inspection of environmental cleanliness and health guidance and supervision were equally examined. Also reviewed in this chapter is the follow up services, health education and health promotion programme in school and also the general prevention and treatment of common ailment and provision of first Aid services for school children.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The main focus of this research work is on the availability of school health services on the health status of students in public secondary schools that has boarding facilities as well as school health services in the Federal Capital Territory (FCT) Abuja.

3.2 The Research Design of the Study

Ex post facto research design was used because of the fact the research was non-experimental in nature. The expost facto that was used is to establish the possible causes of the problem which is already present with the subject, it is against this backdrop that useful information were collected from the target population (students) using structured questionnaire which contain some personal information about the respondents and school health services.

3.3 The Population of the Study

The population of the study consisted of all public boarding secondary schools across the six area councils of the Federal Capital Territory, (FCT) Abuja. According to the FCT Education Secretariat (2007) there are a total number of eighteen (18) secondary schools with boarding facilities with a total

number of seventeen thousand, five hundred and seventy-seven (17,577) of male and female students. Population in this context is regarded as the target group that is to be studied. Subsequently therefore, population is termed to be the establishment of boundary which determines or specify those to be excluded or included from the population (Tackman, 1981).

3.4 Sample Size and Sampling Procedure

The sample size for this study will be three hundred (375) students selected randomly from all the eighteen public secondary schools of FCT Abuja with boarding facilities. For the purpose of this study, Stratified random sampling techniques were used. All boarding secondary schools under the administration of Federal Capital Territory (FCT) were stratified in to six Area Councils in which they were allocated. The number of schools located in each Area Councils were as follows:

Abaji 3, Bwari 4, Gwagwalada 4, Kuje 4, Kwali 2, and Municipal in which gives us a total of 18 boarding secondary schools. To sample classes involve in the study the researcher wrote "Yes" in one piece of paper and "No" on the other pieces of paper this were folded and put in a container well shuffled and the representative of the arms that is JSS I – SSSC III were involved in deep and pick exercise. The arm that pick "Yes" were made to represent their classes. To obtain the respondent of each class the researcher made used of the students that pick yes for the study. In the final analysis those with yes in all the classes were

brought together to participate in the study. However, the researcher made used of two research assistance to help in the administration of questionnaire. The total no of 375 copies of questionnaire were administered in 18 boarding secondary schools. The table below clearly shows the number of questionnaire that were administered and collected on each of the six Area Councils .

Distribution of Questionnaire in Schools. No of questionnaire administered and returned

S/No	Area councils	No of Schools	No of schools selected	No of administered questionnaire	No of returned questionnaire	% returned
1.	Abaji	3	3	70	41	58.5
2	Bwari	4	4	135	98	72.5
3.	Gwagwalada	4	4	55	31	56.3
4.	Kuje	4	4	50	31	62
5.	Kwali	2	2	40	30	75
6.	Municipal	1	1	25	14	56
	Total	**18**	**18**	**375**	**245**	**65.3**

3.5 Instrument for Data Collection

A close ended of self structured questionnaire was developed by the researcher to collect data. The questionnaire that was used consisted of two parts . The first part consist of personal information of the respondent. Section A of the second part solicited for the current health status of students. Section B school

health facilities . Section C contained information on school health guidance and supervision. Section D contained information on inspection of students and environmental cleanliness. Section E contained information on school nutritional programme and Section F contained information on health examination of school children.

The questionnaire employed a 5 point response scale of strongly agreed (SA), agree (A), disagree (D), and strong disagree (SD) and undecided (U). Each response scale will attract: Strongly agree 5 points, agree 4 points, disagree 3 points, strongly disagree 2 points, and undecided 1 point.

For the purpose of measuring the questionnaire, the Likert scale point and interval measurement scale which are quantitative in approach were used since there is a common difference in the 5 points scale thus:

Strongly agree (SA)	5 points
Agree (A)	4 points
Undecided (U)	3 points
Disagree (D)	2 points
Strongly Disagree (SD)	1 point

3.6 Validity of Instrument

For the purpose of validity and of the structured questionnaire, the supervisors of the study vetted a draft copy of the questionnaire; jurors from the department of Physical and Health Education vetted the final draft of the

instrument in order to ascertain the face and content validity of the instrument before distributing the questionnaire to the respondents.

3.7 Administration of Questionnaire

The use of questionnaire was used for this study. The questionnaire for this study comprises of forty (40) items which include questions on personal information of the respondents as well as questions on the school health services.

Base on the literature review on the availability of school health services on the health status of students in secondary schools with special reference to the boarding schools; all the boarding schools were served with copies of the structured questionnaire.

The researcher personally administered the questionnaire to the schools with the assistance of some of the school physical and health education staff who were initially briefed on the methodology of administering the questionnaire to the respondents in the various schools and the researcher later went and retrieve the questionnaire after some few days. Out of the 375 copies of questionnaire distributed, the researcher was only able to retrieve 245 copies which represent 65% of the total number of questionnaire collected from the respondents.

3.8 Procedure for Data Analysis

The researcher personally administered the questionnaire to the schools with the assistance of the school Physical and Health Education (PHE) teachers

who were initially briefed on the methodology of administering the questionnaire to the respondents in the various schools. The researcher later went and retrieved the questionnaire after some days. Out of 375 copies of questionnaire distributed, only 245 copies were retrieved. The researcher made use of Pearson Products Moment Correlation Co-efficient (PPMCC) as a statistical tool to analysed the data collected. This method becomes necessary as a result of the hypothesis that is comparing the relationship between two variables.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the statistical analysis of the data collected from the public boarding school students in the Federal Capital Territory (FCT), Abuja, in relation to the availability of school health services and perceived health status of the students. Attempt was made at providing solution to the research questions of the study. The actual statistical tests were carried out to analyse each of the hypothesis The last section of the chapter presents the discussions of the findings and solutions to the research questions and the hypothesis of the study.

4.2 Results

The result was presented according to the research question and the hypothesis as shown in table 4.1

Table 4.1. Mean scores of the students on their current health status in the schools.

	CURRENT HEALTH STATUS OF STUDENTS	Mean	S. D
1.	Students regularly suffered from malaria due to the poor sanitary condition in my school environment	3.21	1.196
2.	I have ever had diarrhea as a result of poor hygienic condition of the cooking environment	2.82	1.015
3.	I have ever had some skin rashes all over my body	3.01	1.172
4.	Stomach ache is usually students; problem after some meals in the school	3.28	1.279
5.	I have ever had measles as a result of poor ventilation	2.78	1.051
6.	Most of the time I develop ear problem due to the noisy environment in my school	2.81	.999
7.	I have ever contacted some diseases from the school toilet due to poor toilet sanitation	3.26	1.362
8.	I always have cholera each time I drink water in my school	2.80	1.168
9.	Typhoid is a common disease that affect students in the school environment	3.05	1.260
10.	There is always frequent outbreak of communicable diseases due to unhygienic condition of the environment	2.90	1.264
Average mean score		2.99	11.77

Decision level 3.50

The expressed opinion of the students in the table did not reflect an adverse effect of the school environment on their health status. At the same time, it does not reveal inadequacies in the available medical services. For example, in item 1, table 4.1 the students did not agree that students in the respective secondary

schools regularly suffered from malaria due to the poor sanitary condition of their school environment. In item 2, the students did not agree that they have had diarrhea as a result of poor hygienic condition of the cooking environment in the respective schools. In the same vein, they did not agree that they have had skin rashes, stomach ache resulting from poor meals in the respective schools.

With respect to the effect of the environment on the students' health status, no adverse effect was recorded. This is observed in the response to item 5 where the students did not agree that they have experienced measles as a result of poor ventilation in the school. The conduciveness of the environment in the respective schools is attested to in item 6, where the students disagreed with the notion that most of the time they develop ear problem due to the noisy environment in the school. In item 7, they also disagreed with the notion that students have ever contacted some diseases from the school toilet due to the poor sanitation. The students did not agree that they always have cholera each time they drink water in their respective schools. They did not agree that there were frequent outbreak of communicable diseases due to unhygienic condition of the schools' environment. All these point to the fact that the students current health status could be said to be good and that any defect may not be associated mainly to the school environment.

The component of the schools services assessed in relation to the students health status in the boarding secondary schools were scored in means and standard deviations. The test of significance between the related components and

the students' health status were carried out in the test of the hypotheses. In Table 4.3, the students opinion on the available health facilities in the school were scored in means and standard deviations. Mean of magnitude 3.5 implies agreement with the item concerned while means lower than 3.5 implied negative or disagreement with the suggested item. Since the cut-off point is put at 3.5. Therefore, items 1, 3, 4, and 7 are acceptable in the discretion of the researcher. This is on the assumption that 3.5 stands at a point of reference.

The research questions raised to guide the relatedness of medical facilities in the school to the health status of the students are:

Research question 1: Does the availability of school health facilities have any effect on the health status of the students?

This question was assessed by the types of health facilities available in the public boarding secondary schools and their adequacy in catering for the health services of the students. In the table, the opinions of the students on the available health facilities are scored in mean and standard deviation along the five point scale.

Table 4.2: Mean scores of the students on availability of health facilities in the secondary schools.

	SCHOOL HEALTH FACILITIES	Mean	S. D
1.	My school has complete first aid box	3.91	1.127
2.	Health equipment and facilities are available in my school for health examination and appraisal of school children	3.15	1.150
3.	My school has sick bay/health centers where school children periodically undergo medical examination for any medical defects	3.67	1.248
4.	There are enough toilets facilities in my school premises	3.66	1.192
5.	There are enough incinerators in my school where refuse and other garbage are kept	3.97	1.145
6.	There is a school clinic and a nearby hospital for further treat treatment of illness in my school	4.13	1.103
	Average mean score	3.75	1.161

Decision level 3.50

The mean score (3.91) for item 1 in the table 4.2 indicated that the students agreed that their respective schools that they have First Aid box. In item 3, the students agreed that the schools have sick bay or health centers where the school students undergo periodic medical examination for any medical defects. The students were of the opinion that there are enough toilets facilities in the respective school premises. They also agreed that the respective schools have enough incinerators where refuse and other garbage are kept. The students agreed that the boarding schools have school clinic and a nearby hospital for further treatment of illness in where the need for referral services is required. But the students did not agree that there were adequate health equipments and facilities in

the respective schools. The mean score for this item (2) was 3.15, which clearly showed that the students did not agree with the notion that health equipment and facilities were available in the respective schools for health examination and appraisal of the students' health. In the test of the relevant hypothesis, the relatedness between the available health facilities and students health status was tested.

The second research question of the study is in relation to the available guidance and supervision of the school children in the respective schools.

Research question 2: Does the availability of the school guidance and supervision improve the health status of the students?

Another component of the health services assessed in relation to the health status of the students is school health guidance supervision. This variable is directly associated with the schools' health services in the sense that it included the health personnel available in the schools and the health counselors as well as the administrative process involved in the school health services.

Table 4.3: Mean scores of the students on availability of school health guidance and supervision in the secondary schools.

	SCHOOL HEALTH GUIDANCE AND SUPERVISION	Mean	S. D
1.	There are school nurses and other health personnel in my school	4.12	1.005
2.	Guidance and counseling services are provided to the students	4.43	1.036
3.	Health guidance and counseling services help to improve the health status of students	4.10	1.017
4.	Teachers and health personnel counsel students on the finding of health appraisal	3.82	.991
5.	The school health personnel and the teachers are familiar with student health cumulative records	3.72	1.066
6.	Teachers communicate effectively to the parents about the health of their children	3.37	1.366
	Average mean score	3.93	1.080

Decision level 3.50

The scores on table 4.3 revealed that the students agreed that there were school nurses and other health personnel in the respective secondary schools. The students agreed that guidance and counseling services as they relate to students health were provided to the students in the schools and that teachers and health personnel counsel students on the finding of health appraisal in the respective schools. In affirmation of this fact, the students agreed that the school health personnel and the teachers were familiar with student health cumulative records

and that the teachers communicate effectively with the parents about the health of their children in the schools. This observation here point to a positive impact of the school health guidance and supervision to the health status of the students in the respective schools.

Inspection of the school environment for cleanliness is another component of the health services examined in relation to the students' health status in the boarding schools. The research question raised in association with this variable is:

Research question 3: Does the availability of the school inspection for environmental cleanliness improves and the health status of the students?

This examination of the environment is performed in most cases by school health personnel or the relevant school personnel in charge of the health inspection in the respective schools. This exercise is not only restricted to the school environment but extended to sanitation programme in the schools where general routine inspection of students and the entire school premises as well as the provision of constant orientation on personal and environmental hygiene to the students in the respective secondary schools are usually carried out. The opinion of the students on this process of inspection for environmental cleanliness in the respective schools is presented in Table 4.5.

Table 4.4: Mean scores and SD of the responses of the students on inspection for environmental cleanliness in the secondary schools.

	INSPECTION OF ENVIRONMENTAL CLEANLINESS	Mean	S. D
1.	My school always provide good environment sanitation programme for students	4.14	1.031
2.	The school always carry out general routine inspection of students and entire school premises	4.38	0.962
3.	My school usually provide constant orientation on personal and environmental hygiene	3.82	1.100
4.	Food master usually carry out periodic inspection of food and ensures that the food served to the students are made up of adequate balance diet	3.71	1.198
	Average mean score	4.01	1.073

Decision level 3.50

The mean score (4.01) for item 1, in the table 4.4 revealed that the students were of the opinion that there is always inspection of environmental cleanliness in the schools. In confirming this expressed opinion in item 1, the students agreed in item 2 that, the school usually carry out general routine inspections of students and the entire school premises. In item 3, the students agreed that constant orientation on environmental hygiene were regularly provided by the respective school personnel and that Food master usually carry out periodic inspection of food and ensures that the food served to the students are adequate in terms of

nutritional needs. The students could therefore be said to have a healthy environment in the respective schools which would have positive impact on their health status.

Another component of the health services provided in the school and considered to have positive impact on the health of the students is the school nutritional programme. The research question used in guiding this investigation is:

Research question 4: Does the availability of the school nutritional programme improve the health status of students in the boarding secondary schools?

The mean scores of the students in the items used in this assessment of the nutritional programme of the secondary school is presented in Table 4.6.

Table 4.5: Mean scores of the students on school nutritional programme in the secondary schools.

SCHOOL NUTRITIONAL PROGRAMME	Mean	S. D
1. The school provides nutritious meal to the students	3.34	1.389
2. Meals provide for the students are usually prepared in a hygienic environment	3.43	1.109
3. The meals given to the students are taken at regular intervals	3.08	1.139
4. The meals given to the students contains high quality of cholesterol diet	3.00	1.036
5. Cooks and food vendors suffering from diseases are prevented from handling food	3.39	1.255
6. The kitchen and cooking utensils are hygienically maintained	3.35	1.144
7. Cooks and other food handlers are subjected to periodic medical examination	2.72	1.289
Average mean score	3.19	1.194

Decision level 3.50

The scores on table 4.5, did not indicate agreement on the part of the students with the suggested items. The students did not agree for example that the school provides them with nutritious meals nor that the meals were taken at regular intervals. These were indicated with low mean scores in item 1 and 3 in

the table. In item 4, the students did not agree that the meals they were given in the school could be regarded as containing high quality nutritional needs.

There is generally some level of dissatisfaction among the students on the school nutritional programme. The students did not seem to have been satisfied with the way and manner their food is prepared. This is reflected in their opinion on items 5 in the table where the students disagreed with the suggestion that cooks and food vendors suffering from diseases were prevented from handling food meant for students. In furtherance of this opinion, the students disagreed with the notion that the respective school kitchens and cooking utensils were hygienically maintained in item 7. They disagreed with the notion that cooks and other food handlers were subjected to periodic medical examination.

The last component of the school health services that examined in the study was the school medical examination of the students in the boarding secondary schools. The research question raised in this regard was:

Research question 5: Does the availability of the school medical assessment and observation of studentsk promote the health status of students?

The focus here was the on the conduct of health inspection of the students for healthy living. This involved the examination of students' physical body like the eye, nose, scalp and hairs. Regular examination of the students' health records in the schools were examined along this line. The students, opinion on the items are presented in Table 4.6, in means and standard deviations along the five point scale were used in the study.

Table 4.6: Mean scores of the students on school medical examination in the secondary schools.

	HEALTH EXAMINATION OF SCHOOL CHILDREN	Mean	S. D
1.	Students health examination are usually conducted in my school regularly	2.98	1.138
2.	Teachers generally check the parts of my eyes	2.53	.837
3.	Teachers generally check the parts of my nose	2.38	.886
4.	The school has a good health assessment record of students ill health	3.73	1.228
5.	My school health teacher usually observed my scalp and hairs	3.11	1.292
6.	The school nurse is always available to attend to any health problem of students in my school	3.65	1.241
7.	The school teacher usually assess my height and weight	2.71	.938
	Average mean score	3.01	1.080

Decision level 3.50

In the table above, two items are outstanding, these are the quality of health records kept by the schools and the availability of the school nurse to attend to students with ill health. These are indicated in items 4 and 6 respectively in the table. Where the students agreed that the health record of students were well kept and that the nurses were always available to attend to students with ill health in the schools. But there was no agreement on the part of the students that regular examination of students ill health was carried out

regularly in the schools nor that the teachers usually check the students' parts of the body like the eye, ear, the scalp or the hair. The students did not also agree that the school teachers usually assess their height and weight. The aggregate score for the table showed that the students did not really agree that regular medical examination of the students was carried out by the respective personnel in the secondary schools.

4.3 TEST OF HYPOTHESES

The hypotheses were made up of one major hypothesis and five sub-hypotheses. These are as follows:

Major hypothesis: There is no significant difference between the availability of school health services and the health status of students in boarding secondary schools in the Federal Capital territory.

Table 4.7: Correlation between available health services and students health status in the schools

School variables	Means	S.D	S.E	r	DF	P	r-Critical	Decision
School health Services	3.5578	.46297	.02958	0.18	243	.774	.113	Accepted
Students Health Status	2.9619	.73259	04680					

r = .018, DF 243 < 0.05

The result on table 4.7 did not indicate that students' health status in the boarding secondary schools, is significantly correlated with the available health services in the schools. The observed, correlation coefficient (0.018) is lower than the critical value of 0.113 and the observed level of significance is .774 (P > 0.05). This means that the null hypothesis stated showed that there is no significant difference between the availability of school health services and the health status of students in boarding secondary schools in the Federal Capital Territory, therefore the hypothesis stated is accepted.

Sub-hypothesis I: The availability of the school health facilities does not significantly relate to the health status of students.

This hypothesis was tested with the scores of the students on the available medical or health facilities in the boarding secondary schools. The scores were

correlated with the scores of the students on their current health status. The result as indicated in Table 4.9 shows the mean scores of the two variables, the correlation coefficient (r) and the level of significance obtained from the test.

The hypothesis raised actually confirmed statistically the solution that could be proffered to the questions raised in the research study. The primary concern of the hypothesis is to determine if the respondents agreed that the provision of school medical facilities such as; sick bay, school medical personnel, school first aid box and other medical equipments are adequately effective in the secondary schools or not. This hypothesis was tested by a summation of the mean scores for all the components (school health facilities, school health guidance and supervision, health examination of school children, school nutritional programme and inspection of the schools' environmental cleanliness) of the health services available in the boarding secondary schools. The scores of these variables were summed up and correlated with the scores on students' current health status examined in Table 4.2. The Pearson Product Moment Correlation procedure was used in the test of the hypothesis.

Table 4.8: Correlation between available health facilities and students health status in the schools

Schools	Variables	Mean	S. D	S. E	r	DF	P	r-Critical
Available health facilities		3.7476	.62061	.03965	.064	243	.317	.113
Students health status		2.9619	.73259	.04680				

r = .064, DF 243 < 0.05

The observed correlation coefficient (0.064) in the table 4.8 is lower than the critical value of 0.113 and the level of significance obtained in the test is 0.317 (P > 0.05) This means that the differences between the available health facilities in the schools are not significantly correlated with the current health status of the students in the school. The null hypothesis that the availability of the school medical facilities does not significantly relate to the health status of students was uphold.

Sub-hypothesis II: The availability of the school health guidance and supervision does not significantly relate to the health status of students.

This hypothesis was tested with the scores of the students on the school health guidance and supervision carried out in the secondary schools as examined in Table 4.4 along with the scores of the students on their health status. The result of the correlation test is presented in Table 4.10.

Table 4.9: Correlation between school health guidance and supervision and students health status in the schools

Schools Variables	Mean	S. D	S. E	r	DF	P r-critical	
School health guidance and supervision	3.8286	.64554	.04124	.001	243	.990	.113
Students health status	2.9619	73259	.04680				

r = .001, DF 243 < 0.05

The result in the table 4.9 revealed no significant correlation between school health guidance and supervision in the secondary schools and the students' health status. The observed correlation coefficient is 0.001 compared with the critical value of .0.113 at the same degree of freedom. The level of significance observed for the test is 0.990 (P > 0.05). This means that the null hypothesis stated showed that the availability of the school health guidance and supervision does not significantly relate to the health status of students in the secondary schools was retained.

Sub-hypothesis 3: The availability of the school inspection for environmental cleanliness does not significantly relate to the health status of students.

This hypothesis was tested with the students' opinion on the school inspection for environmental cleanliness assessed in Table 4.5 along with the scores of the students on their health status. The result of the correlation test between the two variables is presented in Table 4.13.

Table 4.10: Correlation between available school inspection for environmental cleanliness and students' health status in the schools

Schools Variables	Mean	S. D	S. E	r	DF	P	r-critical
Environmental cleanliness	4.0133	.67643	.04322	.023	243	.716	.113
Students health status	2.9619	.73259	.04680				

r = .023, DF 243 < 0.05

The test in the table 4.10 above indicated a correlation coefficient of 0.023 at 243 degree of freedom. The observed significant value for the test is 0.716 (P > 0.05). This means that the two variables are not significantly correlated. Therefore, the null hypothesis stated showed that the availability of the school health inspection for environmental cleanliness does not significantly relate to the health status of students in the secondary schools, was retained.

Sub-hypothesis 4: The availability of the school nutritional programme does not significantly relate to the health status of students in secondary schools.

The Pearson Product Moment Correlation procedure was used in the test of this hypothesis. The two variables involved are the scores of the students on the nutritional programme available in the schools and the sores on their health status.

Table 4.11: Correlation between available school nutritional programme and students' health status in the schools

Schools Variables	Mean	S. D	S. E	r	DF	P r-ritical
School nutritional programme	3.1866	.74647	04769	.095	243	.139 113
Students health status	2.9619	.73259	.04680			

r = .095, DF 243 < 0.05

The observed correlation coefficient in the test is 0.095 and the significance level for the test is 0.139 (P > 0.05). The result in the table revealed that students' health status in boarding secondary schools is not significantly related to the availability of school nutritional programme. With this result, the null hypothesis on the availability of the school nutritional programme does not significantly relate to the health status of students in boarding secondary schools, therefore, the hypothesis stated was uphold.

Sub-hypothesis 5: The availability of the school medical assessment and observation does not significantly relate to the health status of students.

In the test of this hypothesis, the means scores of the students on medical examination of students by the respective personnel in the boarding secondary schools were subjected to a Pearson Product Correlation procedure along with the students score on their health status. A summary of the result is shown in Table 4.11.

Table 4.12: Correlation between available school medical assessment and observation of students' health status in the schools

Schools Variables	Mean	S. D	S. E	r	DF	P	r-critical
School medical & examination	3.0128	.56303	.03597	.046	243	.471	.113
Students health status	2.9619	.73259	.04680				

r = .046, DF 243 < 0.05

The result of the test as indicated in Table 4.12 did not reveal significant correlation between the two variables. The observed correlation coefficient (0.046) is lower than the critical value of 0.113 and the observed level of significance is 0.471 (P > 0.05). This means that the availability of the school medical assessment and observation of the students in the boarding secondary school is not significantly correlated with the current health status of the students in the schools. Therefore, the null hypothesis stated is upheld.

4.4 Discussions

The main objective of this study is the assessment of the availability of school health services and the health status of students in boarding secondary schools in the Federal Capital Territory FCT Abuja. Among the components of the health services in the secondary schools for examination were school health facilities, school health guidance and supervision, health examination of school children, school nutritional programme and inspection of the schools' environment for cleanliness. From the analysis of the data collected for the study,

students current health status could not be associated with the available health services in the boarding schools.

(1) Health facilities: In the analysis of the students' opinion in table 1, it was observed that apart from the provision of nurses and the medical records kept in the schools, the students did not agree that the other services were adequately provided towards their health status in the schools. This finding agrees with Nwana (1982) that they where large scale deficiencies in the provision of school health services in secondary schools in the Federal Capital Territory Abuja. Though the students were of the view that health facilities and equipments were grossly inadequate, but they agreed in their respective schools that First Aid boxes and sick bay or health centers were available. The students were of the opinion that the available toilets facilities were adequate and that the schools have adequate incinerators with which they could easily take care of the refuse and other garbage within the schools. Though this variable was not found to have significant relation with the students' health status but there was no doubting the fact that the provision of toilet facilities could be a positive factor in the health status of the students in the boarding secondary school.

(2) Health guidance and supervision: The assessment of the school health guidance and supervision revealed that the students agreed that there were

school nurses and other health personnel in the respective secondary schools. The school guidance and counseling services were also provided to the students as they relate to their health. But these were the only services according to Obionu, (2001) is a vital aspect of the school health programme this observation as indicated from the analysis were also adequately provided to the students in the schools. Apart from the issues of the school nurses, the health records were adequately and quantitatively kept by the school authority. These were observed as deducted from the opinion of the students.

(3) Evironmental cleanliness: From the statistical analysis of the data collected for this study, the school environment could be a positive factor to the students' health status. The analysis of the opinion of the students as it concerns the school environment revealed that they had health environment in the respective schools. These developments could be supported by the students' opinion where they agreed that the schools usually carry out general routine inspections of the entire school premises. Also, the study of Ugbonnaya, (2000) revealed that clean environment promote healthy living. The constant orientation on environmental hygiene, which was regularly provided by the respective school personnel included the periodic inspection of food to ensures that the food served to the students were in the required standard. This finding is contrary to Park

(2000), where it was observed that most of our learning environment is plagued with infectious diseases due to poor health habits and sanitary conditions.

(4) Nutritional programme: Another observation in this study is the non-significant relationship of the nutritional programme of the school and the students' health status. The students generally had a negative opinion of their nutritional programme of the school. They did not agree for example that the school provides them with nutritious meals nor that the meals were taken at regular intervals. With the observation of Sofoluwe, (1998) the provision of nutritious meal help in body development.The impression is that there was generally some level of dissatisfaction among the students on this school nutritional programme.

In this study the schools were observed to have regular feeding of the students provided by the school though not in large quantity. The finding is also, in conformity with the view of Ademuwangun and Odutan (1986) they were of the opinion that school children need meals that contain balanced diet and that such meals should be given to the students on a regular basis and in good proportion which should be made compulsory in most Nigerian schools.

It should be noted at this juncture, that the inadequancy to the provision of good nutritious meal at regular interval may be attributed to

the non availability and insufficient supply of funds by the government and other stake holders in the school feeding programme.

(5) **Medical assessment and observation:** Health examination of the students was not really carried out in the schools. In the assessment of health examination of the students, two items are outstanding. These are the quality of health records kept by the schools and availability of the school nurse to attend to students with ill health the vies of Kenneth, (2001) contains that regular as medical assessment and observation of student ensures stable academic activities. But there was no agreement on the part of the students that regular examination of students for ill health was carried out regularly in the schools. And the students did not agree that the school teachers usually check the students' parts of the body like the eye, ear, the scalp, the hair, height and weight. From the aggregate score for the students' opinion the variable could not have contributed positively to the health status of the students.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This study, investigated the availability of school health services and the health status of students in public boarding secondary schools in the Federal Capital Territory (FCT), Abuja.

Structured questionnaire were used as instrument to collect some useful information from the respondents on the availability of school health services in the schools. The questionnaire contains two parts A and B. Part A contains demographic characteristics of the respondents. Part B contains section A - G information on school health services. The five points of Likert Scale was used, where the respondents indicated their degree of agreement or disagreement to the statement as: SA- Strongly Agree - (5), A- Agree - (4), UD- Undecided- (3), D- Disagree- (2), SD- Strongly- Disagree (1), A total of 375 subjects were sampled randomly from the population of 17,577 from 18 public boarding secondary schools of FCT Abuja, to serve as respondents in this study. The questionnaire was thus, duely completed and submitted A total of was 245 questionnaire were statistically analyzed using frequency and percentage. For the demographic characteristics of the respondents, means and standard deviation were used to answer the research questions, while the Pearson Product Moment Correlation

Co-efficient (PPMC) was used to test the hypothesis postulated. A number of research questions and hypothesis were formulated which were subjected to a statistical analysis.

The analysis consisted of the provision of some solutions to the research questions and a test of the study's hypothesis. The test was made up of one major hypothesis and five sub-hypothesis. The major hypothesis tests for significant difference between school health services and students' health status. The Pearson Product Moment Correlation co-efficient (PPMC) procedure was used for the test of the various hypothesis. The result did not show a significant relationship between the two variables. The hypothesis stated was therefore uphold.

The research hypothesis came out with the following findings:

(a) The first sub-hypothesis tested availability of school health facilities and students health status in the boarding secondary schools. The hypothesis shows that there is no significant differences between school medical facilities and health status of students. The result of the correlation conducted on the two variables did not show significant relationship; the hypothesis was therefore retained.

(b) The second sub-hypothesis tested the availability of school health guidance and supervision in one hand and the health status of the students on the other hand. The test did not reveal the significant differences between the two variables; it shows that there exist no significant

differences between school health guidance and supervision on the health status of the student, the null hypothesis was therefore retained.

(c) The third sub-hypothesis tested for significant difference between the students' health status and the school inspection for environmental cleanliness of students in the secondary schools. The test was carried out with the aid of the correlation procedure. The result did not revealed the significant differences between the two variables; the null hypothesis was therefore retained.

(d) The fourth sub-hypothesis tested for significant difference between the students' health status and the available school nutritional programmes. It shows that school nutritional programme has no significant differences with students' health status. The hypothesis was tested with the correlation procedure. The result revealed no significant relationship between the two variables; the hypothesis was therefore retained.

(e) The fifth sub-hypothesis tested for significant difference between the students' health status. The test revealed no significant differences between the two variables. It was reported that availability of school medical assessment and observation is not significantly correlated with the health status of students. The hypothesis was tested with the correlation procedure; the hypothesis was therefore retained.

5.2 Conclusion

On the basis of the result presented in the subsequent chapters, the following conclusions was drawn:

(a) The availability of school health services have been so insufficient to cope with frequent cases of explosion of epidemic diseases among school children.

(b) A proper school health services that embraces the health counselling of students by health personnel is not significantly sufficient to meet up with the health status of students.

(c) The follow-up services in which the school health staff with the co-operation of parent and community agencies in securing correction of remediable defects are not sufficiently available for the students.

(d) School children are often associated with under nourishment, malnutrition, dental pains, emotional disturbances, vision and hearing deficiencies, skin infections and other related diseases it is as a result of poor health knowledge and bad health habit and practices.

(e) The general administration of school health services in various schools are more cumbersome this is as a result of the numerous school health problems in most of the public boarding secondary schools in FCT, Abuja.

5.3 Recommendations

On the basis of the findings of the research study, the following recommendations are made:

1. School health education programme should be made available as part of the school extra curricular activities to create adequate awareness on the

available health services in the school environment since it was observed that some students do not actually recognize the importance of school medical examination.

2. The various school authority should ensure that regular supply of some medical equipments like measurement scale, growth chart, thermometer, sickbay, equipped first aid boxes are supplied to their school for regular medical examination of the students.
3. The control of communicable and non communicable diseases in schools should be included as part of the school health services since it was observed from the research study that these services are practically not available in the school medical and health programme.
4. Food vendors should be properly screened before they are allowed to cook, handle or sell food to school children.
5. Qualify medical health personnel should be encouraged to carry out routine medical examination of students and further referrals, should be made when necessary for further medical attention.
6. The government should encourage schools to have a nearby health clinic for any emergency cases as this study showed that some of the secondary schools do not have school clinics.
7. The government should encourage schools to include school health day into their school programme to enlighten the students on the importance of healthy living.

8. Above all, the government should employ competent health personnel in public boarding secondary schools in FCT to take charge of the school health services, as the research study revealed that provision of school health personnel in secondary schools is grossly inadequate.

SUGGESTION FOR FURTHER RESEARCH STUDY

Similar research study in other states of the federation should be conducted to actually determine the schools that provide school health services to students. In the same vein, those boarding schools that do not provide basic school health services in line with the recommendation of school health services policy should be encouraged to do so.

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APPENDIX I

LETTER OF PERMISSION TO VET QUESTIONNAIRE

Dept. of Physical and Health Education,
Faculty of Education,
Ahmadu Bello University,
Zaira.
19th June, 2009.

Dr. (Mrs.) M.A. Sulaiman
Dr. Musa Umaru
Dr. F.R. Haruna
Dr. (Mrs.) C.O. Adegbite
Dr. E.I. Gunen

Request to vet questionnaire on the relationship of the availability of school health services to the health status of students in public boarding secondary schools in Federal Capital Territory (FCT) Abuja.

Mr. Akerele, Segun Stephen is one of the Master students specializing in health education impartial fulfillment of requirement of his Masters Programme, he is conducting research on the Relationship of Availability of School Health Services to the health status of students in boarding schools in Federal Capital Territory (FCT) Abuja.

In this regard, he has prepared questionnaire to collect information required for his study. On the basis of your professional expertise and experience, you have been selected to critically examine the questionnaire and make necessary corrections for its improvement.

I therefore request you to kindly go through the questionnaire very critically and make your suggestions where ever necessary and return it as soon as possible.

Thank you.

Yours faithfully,
Professor C.E. Dikki
Major Supervisor

APPENDIX II

Faculty of Education
Department of Physical
And Health Education (PHE)
Ahmadu Bello University (A.B.U)
Zaria.
7TH JULY, 2009

LETTER OF INTRODUCTION: AKERELE, SEGUN STEPHEN
M.ED/EDUC/9418/2006 – 2007

I wish to introduce the above named student to you. He is a Masters Degree student of the Department of Physical and Health Education (PHE) Ahmadu Bello University, (A.B.U) Zaira.

He is currently conduction his research on the Relationship of the Availability of School Health Services to the health status of students in Public Boarding Secondary Schools in the Federal Capital Territory (FCT) Abuja as part of requirement for the award of his Master Degree Certificate.

Please, kindly render all necessary assistance required to enable him carry out this assignment successfully.
Thank you.

Yours faithfully,

_____

Professor C.E. Dikki
Major Supervisor

APPENDIX III

LIST OF PUBLIC BOARDING SECONDARY SCHOOLS IN THE FEDERAL CAPITAL TERRITORY (FCT) ABUJA

S/N	NAMES OF SCHOOLS	AREA COUNCIL (LOCATION)	TOTAL POPULATION OF MALE STUDENTS	TOTAL POPULATION OF FEMALE STUDENTS	TOTAL POPULATION OF STUDENTS
1.	Govt. Girls Sec. School	Abaji	-	1003	1003
2.	Govt. Science. Sec. School	Abaji	1283	-	1283
3.	Govt. Sec. School	Yaba	138	105	243
4.	Govt. Day Sec. School	Bwari	469	365	834
5.	Govt. Secondary School	Bwari	1050	373	1443
6.	Govt. Girls Sec. School	Dutse	-	1726	1726
7.	Govt. Sec. School	Shere	81	35	116
8.	Govt. Sec. School	Dobi	226	84	310
9.	Govt. Sec. School	G/Lada	803	698	1501
10.	School for the Gifted	G/Lada	282	221	503
11.	Govt. Science. Sec. School	T/Maje	770	554	1324
12.	Govt. Girls Sec. School	Kuje	-	736	736
13.	Govt. Secondary School	Kuje	990	907	1897
14.	Govt. Sec. Sch. Gwargwada	Kuje	201	113	314

15.	Govt. Sec. School	Rubochi	261	172	433
16.	Govt. Sec. School	Kwali	541	620	1161
17.	Govt. Sec. School	Kashi	609	563	1172
18.	Govt. Science Sec. School	Pyakesa	1163	313	1476
	Total		**8867**	**8588**	**17,577**

APPENDIX IV

RESEARCH QUESTIONS

This questionnaire is on the relationship of the availability of the school Health Services to the health status of students in boarding secondary schools in the Federal Capital Territory (FCT) Abuja.

The questionnaire is made up of two major sections A and B. Section A contains statement on student's personal information while section B contains sub-sections 1 – 7 on school health services. Section B1 contains statement on school health facilities, B2 is on school health guidance and supervision, B3 is on health examination of school children, B4 is on school nutritional programme, B5 is on school health assessment/observation, B6 is on the inspection of school cleanliness and B7 is on statement concerning the current health status of students.

You are expected to tick [✓] in the appropriate column that best represent your opinion.

1. **Age group:**

   a. 10yrs [ ]

   b. 11yrs [ ]

   c. 12yrs [ ]

   d. 13yrs and above [ ]

2. **Gender:**

   a. Male [ ] b. Female [ ]

3. **Present class:**

   a. JSS I [ ]

   b. JSS II [ ]

   c. JSS III [ ]

d. SS I [ ]

e. SS II [ ]

f. SS III [ ]

SECTION B: SCHOOL HEALTH SERVICES

This section contains sub-section 1 – 7, please tick [✓] in the column that best describe your opinion.

Note:

Strongly agree = SA

Agree = A

Undecided = U

Disagree = D

Strongly disagree =SD

A.	**CURRENT HEALTH STATUS OF STUDENTS**	**SA**	**A**	**U**	**D**	**SD**
1.	Students regularly suffered from malaria due to the poor sanitary conditions in my school environment.					
2.	I have ever had diarrhea as a result of poor hygienic condition of the cooking environment.					
3.	I have ever had some skin rashes all over my body.					

4.	Stomach ache is usually student problem after some meals in the school.					
5.	I ever had measles as a result of poor ventilation					
6.	Most of the time I developed ear problem due to the noisy environment in my school.					
7.	I have ever contacted some diseases from school toilet due to toilet sanitation.					
8.	I always have cholera each time I drink water in my school.					
9.	Typhoid is a common disease at the affect students in the school environment.					
10..	There is always frequent outbreak of communicable diseases due to unhygienic condition of the environment.					
B	**SCHOOL HEALTH FACILITIES**	**SA**	**A**	**U**	**D**	**SD**
11.	My school has complete First Aid Box					
12.	Health equipment and facilities are available in my school for health examination and appraisal of school children.					
13.	My school has sick bay/health centers where school children periodically undergo medical					

	examination for any medical defects.					
14.	There are enough toilet facilities in my school premises.					
15.	There are enough incinerators in my school where refuse and other garbage are kept.					
16.	There is a school clinic and a nearby hospital for further treatment of illness in my school.					
C.	**SCHOOL HEALTH GUIDANCE AND SUPERVISION**	**SA**	**A**	**U**	**D**	**SD**
17.	There are school nurses and other health personnel in my school .					
18.	Guidance and counseling services are provided to the students.					
19.	Health guidance and counseling services help to improve the health status of students.					
20.	Teachers and health personnel counsel students on the findings of health appraisal.					
21.	The school health personnel and the teachers are familiar with student health cumulative records.					
22.	Teachers communicate effectively to the parents about the health of their children.					

D.	**INSPECTION OF STUDENTS AND ENVIRONMENTAL CLEANLINESS**					
23.	My school always provide good environmental sanitation programme for the students.					
24.	The school always carry out general routine inspection of students and the entire school premises.					
25.	My school usually provide constant orientation on personal and environmental hygiene.					
26.	Food master usually carry out periodic inspection of food and ensures that the food served to the students are made up of adequate balance diet.					
E	**SCHOOL NUTRITIONAL PROGRAMME**	SA	A	U	D	SD
27.	The school provides nutritious meal to the students					
28.	Meals provided for the students are usually prepared in an hygienic environment.					
29.	The meals given to the students contains high quality of cholesterol diet.					
30.	The meals given to the students are taken at					

	regular intervals that satisfy the students contains high quality of cholesterol diet.					
31.	Cooks and food vendors suffering from diseases are prevented from handling food.					
32.	The kitchen and cooking utensils are hygienically maintained					
33.	Cooks and other food handlers are subjected to periodical medical examination.					
F.	**HEALTH EXAMINATION OF SCHOOL CHIDLREN**	**SA**	**A**	U	D	SD
34.	Students health examination are usually conducted in my school regularly.					
35.	Teachers generally check the parts of my eyes .					
36.	Teachers generally check the parts of my nose.					
37.	The school has a good health assessment record of students ill health .					
38.	My school health teacher usually observed my scalp and hairs .					
39	The school nurse is always available to attend to any health problem of students in my school.					
40.	The school teacher usually assess my height and weight.					