

## **Assessment of Accessibility and Utilization of School Health Services Among Staff of North-Eastern Colleges of Education, Nigeria**

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### **ABSTRACT**

*School health services are services provided through the school system to improve the health and well-being of staff as well as school students and families of the nearest broader community. Thus, the purpose of this study is to assess the access influencing utilization of school health services among academic staff and students of some colleges of education in Northeast Nigeria. Ex-post factor research designed used for this study. The population of the study were 1,808 staff and 17,395 students of selected Colleges of Education in North-eastern, Nigeria. The sample of the study were selected using multistage sampling procedure. The instrument for the study was a 4 Likert scale questionnaire. Frequency and percentage was used to test the formulated objectives and research while one sample t-test was used to analyzed the postulated hypotheses at 0.05 level of significance. From the findings of the study, the study shows that availability of medical services, health counselling services and health-equipment are major significant determinants influencing utilization of school health services among among staff and students of college of Education students in Northeastern Nigeria. Their provision and adequacy constituted significant influence to effective utilization of school health services in colleges of education. It is recommended among others that, Stakeholders should ensure that professional health teachers and related health personnel were recruited into colleges of Education in Northeastern Nigeria towards effective provision of health counselling and the state and other stakeholders of colleges of education in northeastern Nigeria should improve on the provision of health-related equipment to encourage effective utilization of health services by staff and students in the colleges.*

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### **Background of the Study**

School health services are services provided through the school system to improve the health and well-being of staff as well as school students and families of the nearest broader community. This service has been developed in different ways around the globe but the fundamental reason is to protect and promotes the health of the school population including

those that have been organized. Accessibility of school health services is an important aspect of the health delivery system necessary to monitor the health of school children in order to keep them healthy and optimize their learning, (Osuorah and Osinobi 2016). The purpose of school health services is to help children at school achieve the maximum health possible for them to obtain full benefit from their education. School health services are provided by physicians, dentists, school nurses, health education teachers and significant others to protect and promote the health of members of the school community. Similarly, According to a study conducted by Phil and Shella (2017), school health services contribute to the goals of the education system and the healthcare system by providing screening and referrals, administering medication and treatment, providing first aid, providing health counselling and education and supporting students to acquire self – management skills.

American School Health Association ASHA (2017) observed that school health services are preventive and curative provided for the learners and staff within the school setting. Centre for Diseases control, CDC (2008) describes school health services as services provided for students and staff to appraise, protect and promote health. These services are to foster the appropriate use of primary healthcare services to prevent and control communicable diseases and other health problems and provide emergency care for illness or injury through the combined efforts of qualified professionals such as physicians, dentists, nurses health educators, councillors and other health allied personnel.

Furthermore, a study conducted by Kuponiyee and Amoran (year????) determine the school health service in Ogun state school health services was described as preventive and curative services and help in providing information to parent and school personnel on the health status of the school children. It also provides health counselling services for the school community and parents which include: presenting medical screening routine, health screening and examination. Pre-entry medical screening, Routine health screening and examination, School health record (keeping records of the health history of a student), First aid and referral services, Screening tests and medical diagnoses, Control and prevention of communicable disease.

School health personnel are qualified staff that can help all students with preventive care and emergency care, personnel such as school nurses, health educators, physicians, physician assistants and allied health personnel provide these services, improving school health, assessing school health, managing health conditions, promoting health behaviour. School health personnel's deal with health appraisals, control of communicable diseases, record keeping and supervision of the health of school children and personnel and it helps in providing information to parents and school personnel on the health status of school children. Other services rendered include health observation (which involves a physical inspection of the body and behaviours of children), health examinations (screening tests and medical diagnosis) and health records (keeping of children health history). Afolabi and Fasoranti (2016) stated on the availability and utilization of health services play significant roles in the protection and promotion of staff and students health influence on school health services. school health services. Ademuwagun (2006) reported that the provision of health equipment will help toward health services when equipment such as first aid boxes, dustbins, water, thermometers and other equipment and once they are not on the ground, it will be difficult for health personnel to operate.

### **Statement of the Problem**

School health services provide a primary health care approach to staff and students in schools and colleges. However, accessibility and utilization of health services due to lack or inadequate information and perception by staff and students have been a challenge for some

time. This posed a health risk and poor early health management for staff and students by many infections, emotional problems, physical injury and other communicable diseases due to (Oyinlade and Olanrewaju, 2014) in colleges of education. According to UNESCO (2011), accessibility of school health services must not only be made access available in school but effectively utilized to ensure a healthy school environment influencing effective utilization and learning to take place smoothly. Therefore researchers decided to field the existing gap by observing the students and staff of colleges will expose to numerous forms of diseases such as inadequate portable water, malaria fever, measles corebro spinal maringitis (CSM) asthma ulcer typhoid fever and respiratory track infection due to inadequate access and utilization of. It's against this background the researchers were motivated to assess the determinants influencing the utilization of school health services among staff and students in colleges.

### **Purpose of the Study**

The purpose of this study is to assess the access influencing utilization of school health services among academic staff and students of some colleges of education in Northeast Nigeria.

### **Hypotheses**

In this study the following research hypotheses will be tested:

- i) **H<sub>01</sub>** = There is no significant difference in accessibility of school health services among academic staff and students in the colleges of education in Northeast Nigeria.
- ii) **H<sub>02</sub>** = There is no significant difference in utilisation of school health services among academic staff and students in the colleges of education in Northeast Nigeria.
- iii) **H<sub>03</sub>** = There is no significant difference in factors that determine accessibility and utilisation of school health services in the colleges of education in Northeast Nigeria.

### **Methods**

Ex-post factor research designed used for this study. According to Simon and Goes (2013), ex-post factor research designed is a method of testing out antecedents of events that had happened but cannot be manipulated by the researchers. The research design measure the cause-and-effect relationship of student without manipulating the independent variables. Therefore the design was not experimental design and found suitable for this study since the study is aimed to assesses the health of school services influencing utilization among Colleges of Education.

#### **3.3.1 Population of Academic Staff And Students of some Colleges of Education in Northeast Nigeria**

<b>SCHOOLS</b>	<b>STAFF</b>	<b>STUDENT</b>
ASCOE, Azare	323	12145
FCE, Gombe	442	1750
FCE, Hong	720	1800
COE, Gasuwa	323	1700
<b>TOTAL</b>	<b>1,808</b>	<b>17,395</b>

(Field survey 2022)

### **Sample and Sampling Techniques**

The sample size for this study was 17,395 staff and students will be selected using multistage sampling procedure of stratified, random and purposive sampling technique. Multi-stage sampling procedure is the combination of one or more probability will be adopted. To respond to each of the statement well as to determine the scores for each statement the four (4) Likert scale will be used by the researcher to determine the level of agreement and

disagreement on the statement based on the following scoring system;

A – Agree = 3 points

D – Disagree = 2 points

Hence, mean score of any response will be considered positive if it is 2.5 and above and any response less than 2.5 will be regarded as negative score, therefore, for this study 2.5 being mean for 2 point scale will be used. The instrument was vetted by three (3) members in order to ascertain the face and content validity of the research instrument, correction and suggested was incorporated before the final drafted questionnaire on assessment of access influencing utilization of school health services among staff and students of north colleges. A Google questionnaire was designed and posted to various colleges of education on assessment of access influencing utilization of school health services among staff and students of north colleges. To test the formulated objectives and research question frequency and percentage count was used to answer them while on sample t-test was used to used to answered formulated hypotheses.

## Results

**Table 1: Classifications of the Respondents' Demographic Information.**

<b>Variables</b>	<b>Variable options</b>	<b>Frequency</b>	<b>Percentage %</b>
Campus	Off	14, 308	57
	On		43
	<b>Total</b>	<b>17, 395</b>	<b>100%</b>
Level	NCE 1		30
	NCE 1		34
	NCE 2		36
	<b>Total</b>		<b>100%</b>
Gender	Male		68
	Female		32
	<b>Total</b>		<b>100%</b>
Age	15-19 yrs		43
	20-24 yrs		34
	25 and above yrs		23
	<b>Total</b>		<b>100%</b>

Among the among staff and students of college of Education students students in Northeastern Nigeria., 57% stayed off-campus. The rest 43% were on-campus. Their distribution by class showed that 30% were in NCE 1, 34% were in NCE 2 and 36% were in NCE 3. This distribution showed that all the staff and students in the colleges could be said to be fairly represented in the study. From the classifications, of the respondents in the table, 68% were male while 32% were female. The classification revealed that male and female students in the colleges of education were fairly represented in the study which helps to take off the gender bias aspect of the study. The table revealed that 43% of the students were below 12-13 years of age. Students who were between 14- 15years were 34% of the total respondents. Only 23% of the students were above 16years.

### **Availability of medical services as a determinant influencing their utilization in by students of COEs in Northeast Nigeria**

The extent to which available medical health services influences their utilization among among staff and students of college of Education students students in Northeastern Nigeria. was assess with a number of items. These included the adequacy of health personnel, health facilities among others. The responses of the students on each of the items were scored in means and standard deviations computed on the four-point scale/ Decision on each of the items is based on a midpoint average of 2.5. The aggregate mean scores for the table was used for decision and conclusion of the research question. The mean scores for each of the items are presented in Table 2.

**Table 2: Mean scores on aavailability of medical services as a determinant influencing their utilization by students of COEs in Northeast Nigeria**

Sn	Available medical services	Mean	Std. Dev.
1	Health personnel/ trained first Aider are available in my school	2.50	0.913
2	My school conduct routine environmental sanitation of the school premises and classes	3.48	0.585
3	My school has a building as a dispensary health room for treatment of minor illness or injuries during school hour's by health personnel.	1.99	1.006
4	Adequate toilets facilities for both male and female are available in my school.	3.19	0.646
5	In my school sporting facilities/equipment are available for recreational activities.	3.09	0.523
6	My school conducts routine food hygiene inspection among food vendors and school kitchen before giving or selling it to students.	3.12	0.561
7	Purified water for drinking and domestic use are available	3.02	0.737
8	My school keeps health record information of students for sudden illness, injuries during school hours	2.43	1.027
9	My school conduct health education on drugs abuse, to prevent students from being involved in drugs abuse and anti-drugs related crime	3.04	0.685
10	My school conduct routine personal hygiene inspection to students such as teeth, hair, nail, school uniform, skin, on Assembly.	3.02	0.659
	Aggregate mean	2.89	0.333

(Decision mean 0 2.5)

The table revealed that the extent of available medical health services is perceived to have a major influence on their utilization among among staff and students of college of Education students students in Northeastern Nigeria. This is clearly indicated in the table in response to available Health personnel, their adequacy, and their medical services within the schools.

Among other the extent of influence is perceived to be determined by available health services provisions like facilities like toilets and routine food hygiene inspection brought or provided in the schools. Other such services perceived to influence utilization among the students included health education on drugs abuse and routine personal hygiene inspection. The aggregate mean score for the table was 2.89 with a standard deviation of 0.333. The aggregate mean score (2.89) is higher than the decision mean of 2.50 used as the benchmark. The observation implied that the students were of the view that available medical health services was a major determinant influencing their utilization by staff and students of college of Education students students in Northeastern Nigeria.

#### **Availability of health counselling services as a determinant influencing utilization of school health services**

The extent to which available medical health counselling services influenced the utilization of school health services among the students was assessed with a number of items raised in the questionnaire. Among others the questions solicited for opinions on teachers counselling relating to result of health appraisal and observations within the schools and whether students receive such health-related counselling on injuries, ill health, hand washing habit after toilet among others. The students' opinions on items were scored in means and standard deviations on the four-point interval scale. Table 4.3 presents the expressed means and their corresponding standard deviations.

**Table 3: Mean scores of students on counselling as a determinant influencing utilization of School Health services among COEs students in by students of COEs in Northeast Nigeria**

Sn	Available counselling as determinant of utilization	Mean	Std. Dev.
1	Health personnel/ teachers counsel students on the finding result of health appraisal/observation in my school.	2.49	1.066
2	I received health counselling on environmental sanitation to acquire health habit in my school students.	3.20	0.778
3	I received health counselling when I am ill or injured at school dispensary/health room.	2.04	0.959
4	I received health counselling on hand washing habit after toilet used in my school.	2.88	0.727
5	In my school I receive health counselling during school sport recreational activities to prevent sport injuries.	3.19	0.701
6	I received health counselling on food hygiene and effects of eating unhygienically prepared food from vendors/school kitchen in my school.	3.20	0.573
7	I received health counselling on water hygiene to avoid water borne disease in my school.	3.18	0.504
8	In my school health personnel/teachers counsel parents/students before admission to inform the school authority any health problems of student for proper health record of every student.	2.43	1.052
9	I received health counselling on drug abuse in my school.	2.97	0.575
10	I receive health counselling on personal hygiene in my school	3.15	0.512



Aggregate mean	2.87	0.361
(Decision mean 0 2.5)		

The aggregate mean score of 2.87 with a standard deviation of 0.361 obtained for the table show that the students were of the view that available medical health counselling services could be a major determinant influencing staff and students of college of Education students in Northeastern Nigeria. This is demonstrated in the table by the students' agreement with the suggestion that they received health counselling on environmental sanitation, how to acquire good health habit, counselling on ill health or injuries in the schools, hand washing habit after toilet food hygiene and effects of eating unhygienically prepared food, water hygiene to avoid water borne disease and drug abuse among others. With an aggregate mean score of 2.87, it could be concluded that the students were of the view that available medical health counselling services is a major determinant of school health services utilization among staff and students of college of Education in Northeastern Nigeria

**Availability of equipment as a determinant influencing utilization of school health services**

The extent to which available equipment influences the utilization of school health services by staff and students of college of Education students in Northeastern Nigeria was determined by soliciting their opinion on a number of items listed in Table 4.4. Among others, it the influence of available health equipment like weight scale, thermometer, and first aid box equipped with bandage, inhalers and their adequacy in the schools were solicited. Other health related equipment on which the students expressed their views as determinant influencing their utilization of the school health services included Environmental sanitation equipment such as dustbins, brooms, packers, insecticide, along with cost of drugs among others. The expressed opinions on the suggested equipment as determinant influencing the utilization of the school health services were scored in mean and standard deviation in Table 4.4.

The scores in the table showed that the students were of the view that medical equipment constituted a major determinant that influences the utilization of school health services among staff and students of college of Education students in Northeastern Nigeria students. This is indicated by their agreement that Equipment for medical services such as weight scale, thermometer, and first aid box equipped with bandage, inhalers were always available in the schools and that the school sanitation equipment such as dustbins, brooms, packers, insecticide, cutlass, hoes, were provided in the schools. They were of the view that drugs were provided free of charge to students who suffered ill health or injury and that equipment like Wash hand basing, chemical kettles and such associated items were available in the schools.

**Table 4: Mean scores of available equipment as determinant influencing utilization of school health services in COEs students of COEs in Northeast Nigeria**

Sn	Available equipment influencing utilization of school health services	Mean	Std. Dev.
1	Equipment for medical services such as weight scale, thermometer, and first aid box equipped with bandage, inhalers are always available in my school.	2.61	1.009

1	Environmental sanitation equipment such as dustbins, brooms, packers, insecticide, cutlass, hoes, are provided in my school.	3.36	0.646
2	At school health room I always receive medical drugs free of charge when I fall ill or injured.	2.48	1.154
3	Wash hand basing, water, chemical kettles are kept in the school toilet for use by the student	3.17	0.548
4	There are enough sporting facilities and equipment such as athletic field, ball for courts goal nets, relay batons, jerseys, and hockey stick etc. are available in my school.	3.27	0.575
5	Instruments for routine food hygiene inspection among food vendors and school kitchen such as spoon, knife, l for food test, and the use of detergent for washing and cleaning cooking utensils are available in my school	2.89	0.724
6	Borehole, hand pump, protected well, pure water, over head water tanks, sachets purified water, are available in my school.	3.02	0.423
7	Books, files for health record are available in my school	2.07	0.868
8	Equipment for testing drugs abuse through urine, hair, blood, breath, sweat and oral fluid/saliva are not available in my school	1.68	0.875
9	Equipment for personal hygiene inspection such as Nail cutter, soap, hair clippers are provided during personal hygiene inspection for use by the student's in my school.	2.97	0.366
10	Aggregate mean	2.75	0.354

(Decision mean 0 2.5)

Among others, the students agreed that Instruments for routine food hygiene inspection and water sources were made adequately available in the schools. The aggregate mean score for the table was 2.75 with a standard deviation of 0.354. The mean score (2.75) is higher than the decision mean of 2.50. This observation implied that the students were of the view that available health equipment is a major determinant influencing utilization of school health services among staff and students of college of Education students students in Northeastern Nigeria.

### Discussion

This study carried out an assessment of determinants influencing utilization of school health services among staff and students of college of Education students students in Northeastern Nigeria. From the analysis of the data collected, it was observed that available medical health services constituted a major determinant for utilization school health services by staff and students of college of Education students students in Northeastern Nigeria. Among others, it was found that available and health services provisions like facilities like toilets and routine food hygiene inspection brought or provided in the schools. Other such services perceived to influence utilization among the students included health education on drugs abuse and routine personal hygiene inspection. In the test of the first null hypothesis of the study, the expressed opinion on the available medical services were found to be a significant determinant influencing utilization of school health services by the staff and students of college of Education students students in Northeastern Nigeria. The null hypothesis was therefore rejected. The findings here are consisted with Toma (2014) who reported that availability of qualified staff that can help students with preventive care and emergency care, such as school nurse, health educator, physician and their assistants, record keeping and supervision of the health of school children influences utilization of school health services. The finding agrees with Kuponiyi (2016), who stated that School health services contribute to the goals of the education system and the health



care system by providing screenings and referrals, administering medications and treatments, providing first aid, providing health counselling and education, and supporting students to acquire self-management skills. The report stated that in addition, these services seek to enable children benefit optimally from their school learning experience. The findings are in line with Afolabi and Fasoranti (2016) who stated that availability of professional health personnel and their adequacy in terms of professional quality would have significant influence on utilization of school health services.

Finding relating to availability of health counselling services as determinant influencing utilization of school health services among staff and students of college of Education students in Northeastern Nigeria stated that the variable was perceived to be significant. Among others, it was found that students were in agreement with the suggestion that they received health counselling on environmental sanitation, how to acquire good health habit, counselling on ill health, injuries in the schools, hand washing habit after toilet food hygiene and effects of eating unhygienic ally prepared food, water hygiene to avoid water borne disease and drug abuse among others..

Finding relating to availability of equipment as a determinant influencing utilization of school health services among staff and students of college of Education students in Northeastern Nigeria revealed that the variable was a significant. It was found that students were of the agreement that Equipment for medical services such as weight scale, thermometer, and first aid box equipped with bandage, inhalers were always available in the schools and that the school sanitation equipment such as dustbins, brooms, packers, insecticide, cutlass, hoes, were provided. Students were found to be of the view that drugs were provided free of charge to students who suffered ill health or injury and that equipment like Wash hand basing, chemical kettles and such associated items were available in the schools. Among others, the students agreed that Instruments for routine food hygiene inspection and water sources were made adequately available in the schools. In the test of the related hypothesis of the study where the significant of the variables was tested, it was found to be significant.

### **Conclusion**

From the findings in this study, Availability of medical services, health counselling services and health-equipment are major significant determinants influencing utilization of school health services among staff and students of college of Education students in Northeastern Nigeria. Their provision and adequacy constituted significant influence to effective utilization of school health services in colleges of education.

### **Recommendations**

Based on the findings in this study, the researcher would want to recommend as follows:

1. That effort should be made towards provision of medical services in all the among staff and students of college of Education students in Northeastern Nigeria towards effective utilization by students.
2. Stakeholders should ensure that professional health teachers and related health personnel were recruited into colleges of Education in Northeastern Nigeria towards effective provision of health counselling.
3. The state and other stakeholders of colleges of education in northeastern Nigeria should improve on the provision of health-related equipment to encourage effective utilization of health services by staff and students in the colleges.

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