

## Management of School Based Healthcare Programmes (SBHP) for Sustainable Public Secondary Education during Post COVID-19 Era in Cross River State of Nigeria

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### Abstract

*This study examined management of School-Based Healthcare Programmes (SBHP) for sustainable public secondary education during post Covid-19 era in Cross River State of Nigeria. Descriptive survey research design was adopted with a research question and a null hypothesis to guide the study. Census approach was used to select all the 264 principals for the study since the population was not too large to warrant randomization. Data were collected using researchers' constructed instrument titled: Management of School-Based Healthcare Programmes for Sustainable Secondary Education during post Covid-19 Scale (MSBHPSSSEC-19S). The instrument was validated by 3 experts in the fields of Educational Management, Human Kinetics and Measurement and Evaluation. The reliability was established through Cronbach alpha which yielded .89. Data collected were analyzed using the descriptive statistics of mean and standard deviation and inferential statistics of Pearson's product moment correlation techniques. Results obtained revealed that management of school-based healthcare programmes for sustainable secondary education during post Covid-19 Outbreak in Cross River State is very low. It was also found that management of school-based healthcare programmes does not significantly relate to sustainable secondary education during post COVID-19 era in the State. It was therefore recommended among others that principals should integrate the guidelines for COVID-19 prevention and control to promote sustainable school management as endorsed by Federal Ministry of Health, UNICEF, NCDC and WHO.*

**Keywords:** Management, school healthcare programmes, sustainable, secondary education, COVID-19

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### Introduction

All the schools around the world face unique management challenges (World Health Organisation, 2020). Similarly, the resources available to schools for managing health hazards differ as widely as the dangers themselves (Uzoigwe, Owashi & Opuwari, 2020). This often evokes fear and creates formidable school administration challenges, particularly in developing parts of the world, including Nigeria (Ukpong & Uzoigwe, 2020). This tremendously threatens members of the school community, including teachers, school managers, administrative staff, students, parents, health care providers, and other groups interested in improving public health (World Health Organisation, 2020). This paper therefore is focused on how stakeholders might utilize school-based healthcare

programmes to contain and mitigate dreaded Covid-19 for sustainable educational service delivery not only in Cross River State and Nigeria but also across African countries and the world at large.

According to the World Health Organization (2020) COVID-19 are families of viruses that cause illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). COVID-19 is the name given by the World Health Organization (WHO) on February 11, 2020 for the disease caused by the novel coronavirus SARS-CoV-2. It started in Wuhan, China in late 2019 and has since spread worldwide. COVID-19 is an acronym that stands for coronavirus disease of 2019. Ukpong and Uzoigwe (2020) found that COVID-19 is the name of the disease caused by the SARS-CoV2 virus whose viruses and the diseases they cause have different names. For instance, AIDS is the disease caused by the Human Immunodeficiency Virus, HIV. Hence, as mentioned above, COVID-19 is an acronym which stands for coronavirus disease of 2019. On December 31, 2019, a strange new pneumonia of unknown cause was reported to the Chinese WHO Country Office. A cluster of these cases originally appeared in Wuhan, a city in the Hubei Province of China (Ukpong & Uzoigwe, 2020). Geometrically, Cross River State has recorded so many cases of covid-19 patients. The case summaries for Nigeria as at October, 2020, the time of writing this paper were: total samples tested - 152, 952; total confirmed cases -29,286; discharged - 11,828 while death – 654 (BBC, 2020).

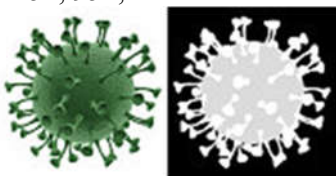


Figure 1: A pictorial representation of COVID-19 virus adapted from World-meter (2020).

Unfortunately, the subsequent resumption of public secondary schools amidst COVID-19 pandemic, following the directives of the Federal government of Nigeria, calls for effective management of school-based healthcare programmes by administrators in order to maintain an uncompromising secondary education service delivery. This is because the Federal Republic of Nigeria (2014) stipulated that secondary education is established by law to effectively prepare students for useful living within the society and for higher education. This national goal can sustainably be achieved in a school environment devoid of health hazards. Reinforcing this fact, Uzoigwe, Owashi and Opuwari (2020) found that sustainable education service delivery cannot exist in a school environment that is plagued with health hazards and pandemic outbreak.

The Organisation for Economic Co-operation and Development (2020) submitted that sustainable secondary education is the degree to which the school system pragmatically meets its current needs without compromising the ability of future generation to achieve theirs. This can practically be done by preventing and controlling health risks via school-based healthcare programmes for enhancing the value of good health. Sustainable secondary education is therefore the ability of secondary schools to survive in this period of global competitiveness through effective management of educational services by ensuring that the exploitation of resources, direction of investment, orientation of technological development and institutional changes are made consistent with the past, present, as well as the future (Akpan & Onabe, 2015).

In October 2020, the researchers observed that Cross River State public secondary schools have reopened after the seven months lockdown but tend to witness sustainability issues in terms of health risk, uncondusive learning environment and poor health status orchestrated by what seems to be the dreaded COVID-19 symptoms. The researchers observed that some staff and students appear to be feeling feverish, chilling and sweating. Others seem to be experiencing shortness of breath, cough, sore throat, aching of the body, slight vomit or diarrhea, asthma or lung disease and conditions

that make it harder to cough. (Zegarra, Chino & Ames, 2020). There appears to be symptoms of dialysis, cirrhosis of liver and weakened immune system even among the immigrant international students who might have either lived with someone suffering COVID-19 or left an infected COVID-19 environment down to Cross River State, Nigeria. Some of the students seem to have been with someone who has COVID-19-someone who is sick, coughs or sneezes and most likely needs the support of school-based healthcare programmes. This causes lack of interest in instructional delivery and absenteeism among teachers and students. Contrarily, if the school-based healthcare programmes were sustainably managed amidst the pandemic, the students would develop more positive attitudes to learning, better behaviour, regular attendance, improved standards and achievements. This depicts that sustainability culture is a significant factor in improving teaching and learning in schools even during a pandemic outbreak.

Ede, Nwafor, Obafemi, Sen, Atonye, Aabha and Alsayed (2020) found that COVID-19 pandemic did have adverse effects on education including, learning disruptions, decreased access to education and research facilities, job losses and increased student debts. The findings also showed that many educators and students relied on technology to ensure continued learning using online medium during the dreaded global pandemic. In other words, Adesegun (2020) found that most of the respondents exhibited poor knowledge of COVID-19, with a mean knowledge grade of 18% which significantly affected their attitude and practice grades respectively. Similarly, Reuben (2020) reported that there was no correlation knowledge of COVID-19 and attitude towards preventive measures and that the respondents had no confidence in the present intervention by Chinese doctors, only 29.0% accepted available COVID-19 vaccines. In the same vein, Olayinka and Afolabi (2020) found that 26% knew they could contract COVID-19 while 92% perceived it as an exaggerated event, ignorance and defiance.

However, the healthy practices required for preventing and controlling dreaded COVID-19 pandemic outbreak in order to promote sustainable school management culture is endorsed by Federal Ministry of Health (2020), UNICEF (2020), NCDC (2020) & WHO (2020), chief among them is school-based healthcare programmes. These programmes are integrated set of planned, sequential, school-affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of individuals in the school system (Reuben, 2020). School-based healthcare programmes however encompass health instruction, health services and healthful school environment (Allensworth, Lawson, Nicholson & Wyche, 2017).

One of the variables of school-based health programmes that could be useful in mitigating COVID-19 pandemic in order to promote sustainable education service delivery is health instruction. The Nigerian Centers for Disease Control (2020) suggested that health instructions will most likely motivate and assist staff and students in improving their health status, prevent diseases and reduce health-related risk behaviors, hence promoting sustainable education. It is during health instructional delivery that every members in the school is taught how to prevent and control COVID-19 virus in order to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skills, and practices which address the physical, mental, emotional, and social dimensions of health (NCDC, 2020; WHO, 2020 & Federal Ministry of Health, 2020). Lim and Morris (2019) found that advancement in age with fewer experiences in health instructions/opportunities, poor instructional delivery format with limited time engendered poor values for good health among administrators. Similarly, McIsaac, Kirk and Kuhle (2015) found that school administrators with unhealthy lifestyle behaviours were more likely to show lack of interest in health instruction compared to their counterparts with healthy lifestyle behaviours. This implies that school managers with poor knowledge and negative attitude in practicing school-based healthcare programme may not effectively disseminate health instruction among staff and students since they might not believe that COVID-19 is a pandemic virus. Also, a study conducted by Mupa and Chinooneka (2015),

Essien (2017) and Lyimo (2017) indicated that health instructions were hampered by limited instructional materials including textbooks and syllabuses and did not go beyond that, hence making the pupils to learn in harsh and unconducive school environments. They also found that inadequate teachers, instructional materials, limited competence in English as a language of instruction, inadequacy of essential physical facilities were determinants for lack of value for good health among school managers and students in Community Secondary Schools in Arusha District Council, Tanzania in an era of epidemic.

Correspondingly, researching on the impact of managing health instruction on sustainable secondary education, Babatunde (2017), and Cho and Baek (2019) reported that an infected school environment of a large-sized class could be improved by subdividing it into smaller groups to facilitate effective feedback on health instruction. However, Ede, Nwafor, Obafemi, Sen, Atonye, Aabha and Alsayed (2020) found that health instruction in some schools was hindered by incompetent teachers, poor infrastructures including network/ power issues, inaccessibility and unavailability of instructional resources to deliver health instruction.

Health services are also part of the components of school-based healthcare programme which focus on the prevention and early identification and redemption of health problems. School health services are grouped under preventive and curative services. (Rochmes, 2016). They sustain educational activities by way of providing health appraisal, health examination, referral services, health counselling, emergency care for sicknesses and injuries, correction of remediable defects, ambulatory services, health screening, prevention and control of communicable diseases among others (Rochmes, 2016). The purpose of school health services during a pandemic is to ensure that all staff and students are healthy and ready for academic work, hence sustaining secondary education programmes (Rochmes, 2016).

Surveying the challenges facing implementation of the referral system for sustainable health care services, Kamau, Osuga, and Njuguna (2017) found that infrastructure, health information systems, capacity of health care workers, and financial resources were the major challenges in implementing health care referral systems for sustainability in Kiambu County. Abdulmalik, Magaji and Ibrahim (2016) reported that school health services were not available in majority (86.70%) of the schools under study and there was no enough qualified health personnel for effective utilization of school health services in the study area for sustainable education service delivery. Darki and Onobumeh (2014) found that there is a correlation between availability of school health services, qualified personnel, facilities and equipment; financial and material resources and sustainable health habits of students. Rochmes (2016) found that school provision of preventive/physical health services is positively related to youths' educational outcomes—including a higher GPA, lower odds of failing courses, and higher odds of graduating from high school—but also little evidence of differing associations across student subgroups. In the same vein, Sherwood-Samuel (2016) established that students who used school-based health clinic services performed better academically in school by improving their attendance, health status, and addressing their medical needs. Similarly, Kocoglu and Emiroglu (2017) submitted that at the end of school nursing practices, an increase was occurred in students' academic achievement grades whereas a decrease was occurred in absenteeism and academic procrastination behaviors.

Leroy, Wallin and Lee (2018) found that poor management of school health services triggered asthma, food allergies, diabetes, seizure disorders, and poor oral health and academic performance. In the same vein, Offor and Major (2015) substantiated that higher percentages of the respondents were of the opinion that portable water, drainage system and waste disposal did not affect educational service delivery, except for first aid where teachers affirmed that it affected academic performance. This implies that school health services have the potential to perform well across a range of health systems' objectives for sustainability of the educational system. The benefits

of school health service systems range from implementing coordinated school health interventions in schools for improving both academic achievement and quality of life for students.

Healthful school environment is another dimension of school-based healthcare programme concerned basically with the physical and psychosocial setting. It is designed to address issues on safety, nutrition, food services, and a positive learning atmosphere. According to the Federal Republic of Nigeria (2014), the activities expected to be carried out during the school health screening for sustainability of the school system are medical and nutritional screening of the school pupils, provision of essential drugs and treatment of minor ailment and referral if need, inspection of school environment and facilities using a checklist, inspection of the food vendors and stalls, inspection of the First Aid Box contents, health Education and promotion, distribution of I. E. C. materials and dental screening and treatment among others.

Adegun, Alebiosu & Ajayi-Vincent (2017) found that an unhealthy physical school environment has significant influence on pupils' health habit. Similarly, Orlu (2013) found that students' health status was affected by unhealthy school environment infected by a pandemic. It was equally found that improper maintenance of fixtures led to lower than average educational programme. Amoran (2017) and Chabo and Ndep (2018) found that disinfectants, dust bins and waste paper baskets were not available in 58 public schools and 123 private schools. Alafin, Adesegun, Izang and Alausa (2019) found that some public primary schools had poor skill-based health education and school health services. Odey, Oguche and Ivagher (2015) reported that management of sewage disposal, routine medical screening of school teachers and food handlers, immunization and control has significant influence on school environment, risk behaviour/health habit and value for good health of students in Zone 'A' Senatorial District of Benue State.

### **Statement of the problem**

The researchers observed that many adolescence illnesses and death are greatly influenced by the environment. Leading causes of mortality in school aged 12 to 18 years could be due to high incidence of exposure to infectious diseases, acute respiratory infections, malaria, diarrheal disease, injuries and COVID-19 virus. Some principals do not seem to provide adequate time for health instruction and sharing knowledge on health-enhancing behaviour. It appears that some administrators do not believe that COVID-19 is existing in their schools so that they may shape views/ norms towards a sustainable lifestyle. All these could affect the efforts of achieving sustainable education service delivery.

It seems some staff and students are more susceptible to environmental hazards than others and therefore need health instruction, health services and healthful school environment to survive especially during the global pandemic outbreak. It has been observed that many schools are springing up without the necessary health care plan for the welfare of students and staff which could lead to unsustainability in terms of low academic performance, negative attitude to learning and absenteeism among others. Attendance and academic performance can improve with effective management of school-based healthcare programmes. But many of the secondary schools in Cross River State lacked the relevant resources such as infrastructures, equipment, personnel and materials necessary for effective management of health-related issues for sustainable secondary education service delivery during COVID-19 outbreak.

Despite efforts made by Cross River State government in collaborating with the Federal Ministry of Health and NCDC in endorsing the guidelines for COVID-19 prevention and control in order to increase the awareness, attitudes and practices towards COVID-19 via school-based healthcare programmes for sustainable secondary education, yet the problem persists. This is evidenced in the inability of some principals to accept the existence of COVID-19 in their schools while most staff/students seem to show glaring symptoms. Thus, it is pertinent to raise the question:

What is the extent of management of school-based healthcare programmes for sustainable secondary education during Covid-19 Outbreak in Cross River State?

### **Purpose of the study**

This study surveyed management of school-based healthcare programmes for sustainable secondary education during Covid-19 outbreak in Cross River State, Nigeria. Specifically, the study sought to find out the extent to which:

- (1) School-based healthcare programmes are managed for sustainable secondary education during COVID-19 outbreak.
- (2) Management of school-based healthcare programmes relate to sustainable secondary education during COVID-19 outbreak.

### **Research question**

- (1) What is the extent of management of school-based healthcare programmes for sustainable secondary education during Covid-19 Outbreak in Cross River State?

### **Research hypothesis**

- (1) Management of school-based healthcare programmes does not significantly relate to sustainable secondary education during COVID-19 outbreak.

### **Methodology**

This research was carried out in Cross River State, Nigeria in the month of October, 2020. Cross River is one of the 36 States in Nigeria located in South Eastern end of the country bordering Cameroon. It is located in the South-South geopolitical zone of the Federation with Calabar as the capital city. The state is named after the Cross River (Oyono), which passes through the state from Cameroon into the Atlantic Ocean. The state is located on latitude 5<sup>0</sup> 45North of the equator and longitude 8<sup>0</sup> 30 East of the Greenwich meridian. Descriptive survey research design was adopted for the study. Stratified and proportionate sampling techniques were used to sample 500 respondents made up of 250 head-teachers and 250 teachers from all the two hundred and fifty (264) public secondary schools in the three education zones in the State. An instrument for the study was a modified four-point Likert-scale questionnaire tagged: Management of School-Based Healthcare Programmes for Sustainable Secondary Education during Covid-19 Scale (MSBHPSSSEC-19S). The instrument was validated by 3 experts in the fields of Educational Management, Human Kinetics and Measurement and Evaluation. The reliability was established through Cronbach alpha which yielded .89, which indicates high internal consistency in achieving the objectives of this study. The e-mails of the respondents were retrieved from Cross River State Secondary Education Board (CRSSEB). Copies of the questionnaire were administered using cross-sectional online survey by the researchers through Internet access. The copies were retrieved, scrutinized, gleaned and analyzed for the study. Data collected were analyzed using descriptive statistics of mean and standard deviation whereas inferential statistics of Pearson's product moment correlation techniques was used to test the hypothesis at 0.05 level of significance.

### **Results**

**Question 1:** What is the extent of management of school-based healthcare programmes for sustainable secondary education during Covid-19 Outbreak in Cross River State?

**Table1:** Perception on the extent of managing school-based healthcare programmes for sustainable secondary education during Covid-19 outbreak in Cross River State

| S/N | Items descriptions                                     | N   | Mean | SD   | Remarks  |
|-----|--|-----|------|------|----------|
| 1   | I share knowledge on health-enhancing behaviour        | 264 | 1.86 | .03  | Disagree |
| 2   | I don't believe that COVID-19 is existing in my sch.   | 264 | 2.82 | 1.90 | Agree    |
| 3   | I shape views/ norms towards a sustainable lifestyle   | 264 | 1.81 | .94  | Disagree |
| 4   | I instruct students on positive health behaviours      | 264 | 1.50 | .80  | Disagree |
| 5   | I provide adequate time for health instruction         | 264 | 1.67 | .87  | Disagree |
| 6   | I teach health with culturally inclusive materials     | 264 | 1.87 | .86  | Disagree |
| 7   | I promote regular diagnostic testing/referral services | 264 | 1.98 | .04  | Disagree |
| 8   | I seldom encourage the usage of self-medication        | 264 | 2.85 | 1.01 | Agree    |
| 9   | I don't believe that COVID-19 is a pandemic virus      | 264 | 2.54 | 1.88 | Agree    |
| 10  | I always promote symptomatic isolation for suspects    | 264 | 1.22 | .79  | Disagree |
| 11  | I encourage everyone in school to wear face masks      | 264 | 1.11 | .44  | Disagree |
| 12  | I diligently work with healthcare givers in my school  | 264 | 1.21 | .56  | Disagree |
| 13  | I ensure that social distancing rule is maintained     | 264 | 1.48 | .91  | Disagree |
| 14  | I enforce the disinfection of school environment       | 264 | 1.60 | .67  | Disagree |
| 15  | I make sure that everyone uses the hand sanitizer      | 264 | 1.35 | .09  | Disagree |
|     | Valid N (listwise)                                     | 264 |      |      |          |

Aggregate mean=2.50, S.D=.601

**Source:** Computed from field work, 2020

Table one presents the mean ratings of the respondents on the extent of managing school-based healthcare programmes for sustainable secondary education during Covid-19 Outbreak in 2020 in Cross River State. From the table, it was observed that all the 15 dimensions of school-based healthcare programmes measures with the responses of the respondents showed the overall mean rating ranging from 1.11 to 1.98, which is less than the aggregate mean of 2.50. This is in exception of disbelieving that COVID-19 is exists in their schools (mean of 2.82), encouraging the use of self-medication (mean of 2.85) and inability to believe that COVID-19 is a pandemic virus (mean of 2.54). Nevertheless, other results revealed that the respondents disagreed with managing school-based healthcare programmes for sustainable secondary education during COVID-19 outbreak in Cross River State. The participants disagreed on sharing knowledge regarding health-enhancing behaviour (mean of 1.86), they disagreed on shaping views/norms leading a sustainable lifestyle (mean of 1.81), they disagreed on instructing students on positive health behaviours (mean of 1.50), they also disagreed on providing adequate time for health instruction (mean of 1.67), they disagreed on teaching health education with culturally inclusive materials (mean of 1.87), they did not promote regular diagnostic testing/referral services (mean of 2.98), the participants refused to accept promoting symptomatic isolation for suspects (mean of 1.22), they did not encourage everyone in school to wear face masks (mean of 1.11), they did not diligently work with healthcare givers in their school (mean of 1.21), they also did not ensure that social distancing rule is maintained (mean of 1.48), they did not enforce the disinfection of school environment (mean of 1.60) and did not make sure that everyone uses the hand sanitizer (mean of 1.35).

Therefore, the answer that can be given to the research question seeking to find out the extent of management of school-based healthcare programmes for sustainable secondary education during Covid-19 Outbreak in Cross River State is that the extent of the implementation is very low in Cross River State. From the analysis, this poor implementation was as a result of administrators' inability to believe that COVID-19 exists in their schools; therefore it is not a pandemic virus, hence encouraging the use of self-medication for detected symptoms of sicknesses.

**Ho1:** Management of school-based healthcare programmes does not significantly relate to sustainable secondary education during COVID-19 outbreak.

Pearson product moment correlation analysis of the relationship between management of school-based healthcare programmes and sustainable secondary education during COVID-19 outbreak.

| Variables of (SBHP)                 | $\sum X$ | $\sum X^2$ | $\sum XY$ | r-cal  |
|-------------------------------------|----------|------------|-----------|--------|
|                                     | $\sum Y$ | $\sum Y^2$ |           |        |
| Health education ( $X_1$ )          | 2748     | 40036      | 24361     | -0.167 |
| Health services ( $X_2$ )           | 2210     | 28146      | 19584     | -0.145 |
| Healthful environment ( $X_3$ )     | 2321     | 28721      | 20562     | -0.171 |
| Sustainable secondary education (Y) | 1783     | 17749      |           |        |

N=264; df=262; Critical r=.138

The results presented in Table 1 showed that the calculated R-values of  $X_1$ ,  $X_2$  and  $X_3$  are -0.167, -0.145 and -0.171, in that order, and are found to be statistically less than the critical r-value of 0.138 at .05 level of significance and 262 degrees of freedom. With this result, the null hypothesis was retained on the ground that the calculated values were found to be statistically less than the tabulated value.

### Discussion of findings

One of the findings of this study revealed that management of school-based healthcare programmes for sustainable secondary education during Covid-19 outbreak in Cross River State is very low perhaps due to the administrators' tendencies in promoting self-medication vis-à-vis their inability to believe that COVID-19 is actually a pandemic outbreak in Cross River State. This finding is in tandem with that of Adesegun (2020) who found that most of the respondents exhibited poor knowledge of COVID-19, with a mean knowledge grade of 18% which significantly affected their attitude and practice grades respectively. Similarly, the finding is in agreement with that of Reuben (2020) who reported that there was no correlation with knowledge of COVID-19 and attitude towards preventive measures, and that the respondents had no confidence in the present intervention by Chinese doctors, only 29.0% accepted available COVID-19 vaccines. In the same vein, the finding corroborates that of Olayinka and Afolabi (2020) who found that 26% knew they could contract COVID-19 while 92% perceived it as an exaggerated event, ignorance and defiance.

Another results of the analysis revealed that there is a negative correlation between management of school-based healthcare programmes (health education= $X_1$ , health services= $X_2$ , Healthful school environment= $X_3$ ) and sustainable secondary education during COVID-19 outbreak. This negative correlation implies that an increase in one variable (X) leads to a decrease in the corresponding variable (Y) and vice versa. Since the negative correlation indicated in this analysis is not statistically significant, the implication is that an increase in the management of school-based healthcare programmes may likely mitigate dreaded COVID-19 pandemic outbreak for sustainable secondary education in Cross River State.

The finding of this study is in agreement with the earlier position of Magaji and Ibrahim (2016) who reported that school health services were not available in majority (86.70%) of the schools under study and there were no enough qualified health personnel for effective utilization of school health services for sustainable secondary education in the study area. This result is also in consonance with that of Kamau, Osuga, and Njuguna (2017) that infrastructure, health information systems, capacity of health care workers, and financial resources were the major challenges in implementing health care referral systems for educational sustainability.

The result that emerged from the analysis done with respect to variables  $X_1$  and  $X_2$  revealed that Lim and Morris (2019) found that advancement in age with fewer experiences in health instructions/opportunities, poor instructional delivery format with limited time engendered poor values for good health among administrators. Similarly, McIsaac, Kirk and Kuhle (2015) found that



school administrators with unhealthy lifestyle were more likely to show lack of interest in health instruction compared to their counterparts with healthy lifestyles.

The results of the analyzed data obtained in respect to variable  $X_3$  revealed a negative correlation between healthful school environment and sustainable secondary education during COVID-19 pandemic. This implies that an unhealthy school environment will likely worsen the spread of COVID-19 pandemic hence breeding unsustainable secondary education. This is in line with the finding of Adegun, Alebiosu and Ajayi-Vincent (2017) which indicated that an unhealthy physical school environment has significant influence on pupils' health habit. It is also in agreement with that of Amoran (2017) and Chabo and Ndep (2018) who found that disinfectants, dust bins and waste paper baskets were not available in most of the public and private schools. It supports the findings of Alafin, Adesegun, Izang and Alausa (2019) who found that some public primary schools had poor skill-based health education and school health services.

This finding could be as a result of the fact the principals and teachers do not believe that COVID-19 exists in their schools as a pandemic virus hence the poor management of school-based healthcare programmes. There is no sustainability in the educational service delivery. They are not actually enforcing the prevention and control of COVID-19 as endorsed by Federal Ministry of Health, UNICEF, NCDC and World Health Organisation (WHO).

### **Conclusion**

On the strong point of the findings, it was concluded that management of school-based healthcare programmes for sustainable secondary education during Covid-19 outbreak in Cross River State is very low. It was also concluded that there is a negative correlation between management of school-based healthcare programmes and sustainable secondary education during COVID-19 outbreak.

### **Recommendations**

Based on the findings of this study, the following recommendations were made:

- (1) School administrators should work with healthcare providers to integrate COVID-19 mitigation practices in school-based healthcare programmes for sustainability
- (2) Principals should support key messages and actions for COVID-19 prevention and control in schools as endorsed by Federal Ministry of Health, UNICEF, NCDC and WHO

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