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Assessment of Resources Availability for Wash Programme Implementation in Secondary Schools of Calabar Education Zone Cross River State, Nigeria.

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Abstract

This study is an assessment of resources' availability and accessibility for WASH Programme implementation in Calabar Education Zone secondary schools. The study was guided by two specific purposes and two research questions. The study adopted a mixed methods design. The population of the study was 13,372 comprising all JSS2 and SSS2 students across all 86 secondary schools in the zone. The sample for the study was 681 respondents drawn using multi-stage sampling approach, {purposive sampling and simple random sampling). The instruments used for data collection were WASH Interview Guide (WIG) (qualitative) and Checklist on Water, Sanitation/Hygiene and Environmental Sanitation (CWASHES) (quantitative). Quantitative data collected were analysed using percentage scores while qualitative data were analysed using thematic analysis. The findings of the study showed that safe drinking water was very lacking in schools, almost to the point of being totally unavailable. It also showed that functional toilets, urinals, hand washing facilities and waste baskets were also very lacking in schools. Based on the findings and conclusions, it was recommended among others that emphasis be laid on ensuring that secondary school students have access to safe drinking water and other necessary sanitation/hygiene resources/facilities most especially in this era of unending issues of COVID-19.

Introduction

Access to water supply, sanitation and hygiene services is a fundamental need and a human right as it is vital for the dignity and health of all people. The Water, Sanitation and Hygiene (WASH)

programme is a subcomponent of the child survival programme component of the United Nations Children's Fund (UNICEF) created in the early 1990s after the International Drinking Water Supply and Sanitation Decade (1981-1990). It was created to serve as a country-level program with a focus on reducing the risk for diseases by creating environments that support good personal hygiene and sanitation. Its overall initial objective was to contribute to the realization of people's (with emphasis on children) rights to survival and development through promotion of the sector and support to national programs that increase equitable and sustainable access to, and use of safe water and basic sanitation services and promote improved personal hygiene (UN, 2015). The importance of the sector was evidential in its inclusion in the then Millennium Development Goals (MDGs) as MDG 7 with its accompanying target 10.

Due to many countries' inability to attain the MDGs, Sustainable Development Goals (SDGs) were designed to drive the global purposes further, SDG 6 and its accompanying targets are designed to spur action within the water, sanitation and hygiene sector. Specifically, targets 6.1 and 6.2 are designed to that effect. Target 6.1 states thus; "By 2030, achieve universal and equitable access to safe and affordable drinking water for all"; while target 6.2 states thus; "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations". In addition to the aforementioned targets of SDG 6, the indicator for target 4a is also concerned in part with water, sanitation and hygiene. The indicator is stated as follows - The global indicator selected by UN Member States for monitoring SDG target 4a is "Proportion of schools with access to: … (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic hand washing facilities (as per the WASH indicator definitions)" (Boeren, 2019).

From the foregoing, achieving equitable and sustainable Water, Sanitation and Hygiene (WASH) services is a long-standing global goal which has been spurred on by SDG 6 in recent times. Access to water is strongly linked to hygiene practices which in turn are strongly associated to health which in itself is a strategic human development indicator (Folayan, Obiyan & Olaleye, 2020). This was a reason for global actions to improve water access, sanitation and hygiene (WASH). The aim of WASH is to empower countries to enhance their access to and use of safe water and sanitation service, and to improve sustainable hygiene practices (Akwataghibe, Wegelin, Postma, Fajemisin, Banda, Khan, Jurji & Toonen, 2018). A close look at the targets shows that in recent times, the objective of WASH pays special attention to women and girls and those in vulnerable situations. Even before the global calls for development goals (the MDGs and SDGs), UNICEF has been working with countries and its cooperating partners to ensure increasing access to and use of improved water sources, sanitation facilities and hygiene practice. In recent times, UNICEF's emphasis has been on those countries that did not attain the MDGs, of which Nigeria is inclusive.

In 2010, an initiative tagged the Nigeria's 2014-2017 Country WASH Programme was designed to ensure increased access to, and use of water sources, sanitation facilities and hygiene practices, particularly among vulnerable communities (FGN, 2020). The four components of the 2014-2017

WASH Programme were as follows – (i) Sanitation, Hygiene and Water in Nigeria Project II (SHAWN II); (ii) Water Supply Sanitation Sector Reform Programme II (WSSSRP II); (iii) Water Supply Sanitation Sector Reform Programme III (WSSSRP III), and (iv) Niger Delta Support Programme (NDSP). With the European Union (EU) as a cooperating partner, the EU (WSSSRP II/III, NDSP) were designed to be implemented in the following states - Akwa Ibom, Bayelsa, Delta, Edo, Rivers, Anambra, Cross River, Kano, Jigawa, Osun, Adamawa, Ekiti and Plateau. The operating context for the FGN/UNICEF Nigeria WASH Programme (2014-2017) included weak sector indicators, the development of the 2016-2030 Partnership for Expanded Water Supply, Sanitation & Hygiene (PEWASH) Strategy and the National Roadmap for Eliminating Open Defecation (FGN, 2016; 2020).

The key projects that formed the UNICEF Nigeria's WASH Programme with the Government of Nigeria (WSSSRPII, WSSSRPIII, SHAWN II and NDSP) focused on – (i) delivering and supporting safe access to WASH services across schools in the aforementioned states; (ii) supporting community engagement in WASH for sustainability, and; (iii) developing strong and effective systems for delivering and supporting a WASH sector-enabling environment (FGN, 2020). A succeeding WASH Programme for 2018–2022 was to support the government in implementing the PEWASH, to ultimately end Open Defecation (OD) in the country by 2025 and provide access to basic water supply and sanitation to all rural inhabitants by 2030 (FGN, 2016). The 2018-2022 Programme was specifically designed to – (i) decrease the population's proportion practicing OD from 25% (baseline) to 12% (target) by 2022; (ii) increase the population's proportion using basic drinking water from 69% (baseline) to 76% (target) by 2022, and; (iii) increase the number of schools with functional gender sensitive WASH facilities from 28% (baseline) to 35% (target).

WSSSRP II was delivered between 2012-2018 and extended to 2019. It was designed to follow on from the previous WSSSRP I working in six focal states: Anambra, Cross River, Jigawa, Kano, Osun and Yobe. The following activities and strategies were included within the Programmes for schools: – (i) water point rehabilitation and construction; (ii) construction of ventilated improved gender sensitive pit latrines (VIPs); (iii) training of pupils in group hand washing: and, (iv) training of teacher, parent-teacher association (PTA) and school-based management committee (SBMC) in establishment and operations of environmental sanitation clubs (FGN, 2020). Toilets and sanitation facilities cater for some of the most critical human functions. Inadequate access to facilities coupled with poor knowledge of urinary or bowel activities do have very wide implications for individuals' physical, emotional and psychological health (Ofili, Esu & Ejemot-Nwadiaro, 2020). It mostly affects all children severely especially for those with disabilities or additional needs, children with bladder conditions or even children who are bullied (Inah, Ntekim, Nji, Egbonyi & Mboto, 2020).

In some cases, the extent of cleanliness/poor toilet hygiene and its usage can serve as an indicator of risk of transmitting infections and diseases which can cause short term illness and absence from schools. In other cases, it serves as a contributory factor to health and psychological conditions that persist beyond school and manifest in seriously malignant forms in later life (Trinies, Garn, Chang & Foreman, 2016). Poor hygiene can cause school-age girls in developing countries to skip

classes, mostly when they are menstruating. In order to ensure privacy in communal toilets, pupils who may seek privacy may possibly encounter snakes in the bushes or other dangers. The inertia to use dirty, smelly or inappropriate facilities can give rise to major short- and long-term health implications. A possible response can be limiting intake of water during the day to inhibit the need to use a toilet or suppress any physical urge, thus aiding psychological problems in eliminating waste effectively.

Prior to recent times, the WHO/UNICEF WASH Joint Monitoring Programme (JMP) was more concerned with households' access to WASH, thus less concerned with institutional (schools) access (Ohwo, 2019). With increasing emphasis on education as a basic right for children ever since the 21st century, the risk of acquiring infectious diseases due to inadequate WASH services in schools is high. Hence since 2010, the JMP has prioritized global monitoring of WASH in schools and healthcare facilities. According to Oluyinka and Adebayo (2019), school-age children constitute about 23% of the population of the average Nigerian community. In Nigeria, the school environment has direct contact with more than 80% of the nation's population aged 5-17 years for about 7 hours a day, and for a period of up to 13 critical years of their social, psychological, physical, and intellectual development (Ohwo, 2019). For every child, school-age is a critical formative period of rapid growth and development. Even as they are totally dependent and not considered productive as it concerns national income generation, the health status of the school-age and indices are used to determine a nation's state of development.

In recognition of the importance of water, sanitation and hygiene practices in schools, the Federal Government introduced the National School Health Policy (FGN, 2006). Inclusive in it was the school health programme, with her scope covering ensuring a healthful school environment. According to the Policy, the objectives of the healthful school environment are to provide – (i) an adequate number of gender-sensitive toilet facilities; (ii) adequate safe water supply and sanitation facilities for the school community, and; (iii) proper drainage and waste disposal facilities (FGN, 2006). As stated in the Policy, these are conditions required in schools to meet the standard of a safe and healthful physical environment in line with water, sanitation and hygiene services.

Chabo and Antor (2018), and Folayan, Obiyan and Olaleye (2020) observed that in the policy, the conditions required to meet the standard include – (i) presence of an adequate number of gender sensitive toilets facilities for each of staff and students (at least one toilet compartment – one water closet for 30 learners); (ii) presence of provision for safe water, and each water point should serve a maximum of 250 people; (iii) the water points should be located at least 30 meters from any soak away or toilet; (iv) cleanliness among the learners should be enhanced by placing wash-hand basins with soap at strategic positions within the school compound; (v) maintenance of good sanitation should be ensured by providing proper drainage and waste disposal facilities, and; (vi) there should be provision for adequate supply of rust-resistant, water-proof and rodent-proof containers for collection of refuse and arrangement made for these containers to be frequently emptied and burnt or carried by the Municipal arrangements.

Safe and adequate water supply, and sanitation/hygiene facilities and services in schools are pre-requisites for the right to basic education for school-age children (Chabo & Akpan-Idiok, 2019). Sufficient and wholesome water supply is the most basic and necessary prerequisite for the maintenance and sustenance of healthy living. School, for most individuals, is most often the first contact they make with the environment away from home. Thus, children tend to spend significant and critical number of years learning, growing and developing in such environments (Egbinola & Amanambu, 2015). It has been observed that the level of participation in educational programmes depends on the health status of children. A healthy and mentally alert child is more likely to attend to school activities as required by the curriculum (Ogbe, 2020).

The school approach of enhancing WASH practices can be a veritable route through which the awareness of appropriate and acceptable hygiene and sanitation practices can be entrenched (Olukanni, Ducoste & George, 2014). Schools being the primary agent through which societal change can be brought about can be said to occupy the pride of place as far as it concerns total community sanitation campaign. It has also been established that appropriate and adequate WASH services in schools can enhance health, boost educational accomplishments, improve gender fairness, and bring about a constructive influence on communities (Alafin, Adesegun, Izang & Alausa, 2019).

Schools are known to be the principal place of education for students who have a central role to play in the community. In the event of school sanitation and hygiene education being given prominence, an effective implementation of plans on physical infrastructure, hygiene education and monitoring/evaluation of schools in such regard can possibly result in a change in school children's behaviour that will afterward impact on the community (Olatunji & Thanny, 2020). In order to enjoy the benefits of adequate WASH services in schools, there is need to acquire more reliable and valid data on the actual status of WASH in schools. This is in order to comprehend the extent of issues militating against adequate WASH services in schools and also develop workable intervention strategies to tackle the barriers (Ohwo, 2019).

WASH programme in schools within Cross River State has been in implementation since 2012 till date as a result of the WSSSRP I and II programmes (2012-2019), the Nigeria's Country WASH Programme (2014-2017), and the PEWASH programme (2016-2030). In line with the primary objective of the global WASH programme, the objectives of the three programmes in schools is to ensure - (a) water point rehabilitation and construction; (b) construction of ventilated improved gender sensitive pit latrines (VIPs); (c) training of pupils in group hand washing, and; (d) training of teacher, parent-teacher association (PTA) and school-based management committee (SBMC) in establishment and operations of environmental sanitation clubs.

In line with the objectives of the various WASH programmes in schools, it is assumed that an evaluation of the following variables can possibly provide insights into the programmes' progress in schools - (i) availability and accessibility of safe drinking water, and; (ii) availability and accessibility of sanitation and hygiene resources/facilities. Availability and accessibility of safe drinking water refers to the extent to which safe drinking water is available and accessible for learners' use in schools. Being one of the core objectives of the WASH programme, it has been

reported that lack of or water insufficiency leads to dirty school environments, especially dirty toilets (Egbinola & Amanambu, 2015; Alafin *et al*., 2019).

Availability and accessibility of sanitation and hygiene resources/facilities refers to the extent which toilets, waste bins, hand washing basins, soap, etc., are available in schools for use by learners. Also, another core objective of the WASH programme, it has been observed that non-availability and inaccessibility to sanitation and hygiene resources/facilities is related to prevalence of diseases in schools and rate of absenteeism/learners' attrition in schools (Chabo & Antor, 2018; Inah *et al*., 2020). Based on available literature, there has been no assessment of resources' availability for WASH program implementation in Calabar Education Zone secondary schools in Cross River State ever since the implementation of the programme in schools. In view of the necessity for the study, this research was designed to undertake an assessment of resources' availability for WASH programme implementation in Calabar Education Zone secondary schools in Cross River State, Nigeria.

Statement of the Problem

The WASH programmes in schools from 2012 were designed to undertake rehabilitation/construction of water points, construction of modernised gender sensitive pit latrines, and training of students in hand washing behaviours/engagement in environmental sanitation clubs. The basic objectives of the programme in schools, for all the students, have been outlined to include ensuring – (i) equitable access to safe and affordable drinking water; (ii) equitable access to appropriate and adequate sanitation/hygiene services; (iii) an end to open defecation, and; (iv) students' acquisition of appropriate WASH Knowledge, Attitude and Practices (KAP). Contrarily, a visit to most secondary schools in Calabar Education Zone of Cross River State appears to reveal otherwise, with a seeming lack of effective implementation of the components of the program. Most schools, apart from lacking safe drinking water points, also appear not to have had any water point in recent times. The very few ones that fortunately have are mostly in very dilapidated state.

Appropriate WASH associated knowledge, attitudes, and practices (KAP) are strategic indicators of water/sanitation/hygiene related diseases' prevalence in schools. Poor WASH knowledge results in unhygienic practices and poor attitudes lead to pollution of water and spreading of illnesses. Such inadequate WASH knowledge leads to wrong perceptions, resulting in large dependence on surface waters for drinking, open defecation practices being perceived as normal and commonly practiced, and poor water collection and storage behaviours, contaminating water and causing illnesses. This appalling and distressing condition in schools called for an assessment of available resources for WASH Programme implementation in schools. Consequently, this research was designed to answer the following question, what resources are available for WASH Programme implementation in Calabar Education secondary schools in Cross River State, Nigeria?

Purpose of the Study

The purpose of this study was to assess resources' availability for WASH Programme implementation in secondary schools, Calabar Education Zone in Cross River State, Nigeria. Specifically, this study;

1. Ascertained the extent of availability and accessibility of safe drinking water in secondary schools.
2. Verified the extent of availability and accessibility of sanitation and hygiene resources/facilities in secondary schools.

Research Questions

The following research questions guided the study;

1. To what extent is safe drinking water available and accessible in secondary schools?
2. To what extent are sanitation and hygiene resources/facilities available and accessible in secondary schools?

Literature Review

A survey of 12 secondary schools in Lagos and Ogun States by Olukanni (2013) revealed that only 3 had drinking water points (boreholes). Only one of the schools had a functional W/C. The ratio of students to toilet ranged from 70:1 to 320:1 and none of the schools had a urinal. Only 1 of the schools had hand washing points but without available soap. An assessment of water facilities in schools in Rivers State by Kotingo, Ayerite and Chukwuma (2014) revealed that out of 25 investigated schools, 1 had water piped to the school 22 had borehole with electric pump while 2 had no water supply. For the 23 that had water supply within their premises, 18 were constant while 5 were erratic.

Egbinola and Amanambu (2015) examined water supply, sanitation and hygiene education in secondary schools in Oyo State and reported that borehole was the source of water supply for 9% of the investigated schools, 14% accessed water from pumped wells while 77% accessed water from open dug wells. The result also revealed that 24% of schools used W/C while 76% of schools used pit toilets. For those using pit toilets, 88% were ordinary pit toilets while 12% used VIP. It was also reported that the number of students to toilet within the schools ranged from ratios of 83:1 to 510:1 in schools. Absence of wash hand basins was reported in 77% of the schools, and no soap in 88% of the schools with wash hand basins. A study by Chabo and Antor (2018) on secondary schools in Cross River State showed that functional taps and toilet facilities were sorely lacking in most schools. In addition, most did not have waste bins.

In a survey, Stanley, Ugboma, Okeke, Olodiama, Odubo and Oboro (2018) observed that out of 6 assessed schools in Bayelsa State, only one had a borehole within its premises and water supply was inadequate. The available toilets in all of the schools were W/C, pit latrine and buckets but the toilet facility mostly used was nearby bushes as lack of water supply rendered all of the available toilets non-functional. None of the investigated schools had urinals. An investigation by Alafin, Adesegun, Izang and Alausa (2019) on secondary schools in Ogun State revealed that only one of the five investigated schools had running water while the rest got their water supply from

borehole facilities outside the school. All the schools had toilet facilities with four of them using pit latrines while one had a W/C. In 80% of the schools, the number of students to toilet ratio was 90:1 while in the other school it was more than 90:1. None of the schools had toilet paper or soap for hand washing after using the toilet. All of the schools had gender-differentiated toilets, as well as separate toilet facilities for both staff and pupils. Only three of the schools had a wash hand basin available in front of the classrooms. All of the schools had waste bins available but only two had a bin for each class and one had a waste bin shared by two classes. The others made use of centrally located waste bins. One of the schools had waste bins in the classes made from used cartons.

A study by Ejimogu, Okereke, Amadi and Amadi on schools in Imo State (2019) showed that only one out of the eight schools surveyed had functional running water. Only one school had a W/C while the others had VIP toilets and ordinary pit toilets. Number of students to toilet ratio was above 100:1 for each of the schools. Ohwo (2019) conducted a study on schools in Bayelsa State and observed that water supply ranged from erratic to no supply. Source of water supply was borehole (only in 2 of the 15 investigated schools). Four schools used W/C, eight used pour-flush toilets while three had no toilet facilities. Number of students to toilet ratio ranged from 100:1 to 760:1 and only two of the schools had water, tissue paper and soap within their toilet facilities. An investigation of schools in Sokoto State by Sarkingobir, Sharu and Zayyanu (2019) revealed that only 1 school out of 9 investigated schools had pump water supply within their premise and it was inconsistent. The pit latrine was the only available toilet in 6 of the schools with the ratio of students to a toilet being from 105:1 for the schools. 3 of the schools have hand washing facilities and they were reported to also have soap available for washing hands.

Inah, et al (2020) verified water supply and sanitation facilities in schools in Cross River State and found out that out of the 10 investigated schools, 9 only had tap water which was sparingly functional. Similarly, 9 of the schools had pour-flush toilets while 1 had an ordinary pit toilet. Number of students to toilet ratio was above 100:1 for each of the schools and toilet tissue was not often provided. Ogbuehi, Osia-Prince and George (2020) evaluated availability of sanitary facilities in Bayelsa State schools and reported that the toilet facilities mostly available were ranked in the following descending order – bushes, W/C, pit latrine and buckets. The W/C and pit latrines were reportedly available in just 3 of the schools with student to toilet ratio ranging from 110:1 to 350:1. 7 out of the 8 investigated schools had no urinals. Water supply within schools was also ranked in the following descending order – borehole, tap, rain harvest and well. Just 2 of the schools had each of a borehole and a tap within their premises. Only 3 schools had functional hand washing facilities with just 1 school having soap available for hand washing.

Of 16 investigated schools across Rivers and Bayelsa States, Ojukwu and Chukwu-Okeah (2020) reported that just 5 had boreholes within the school premises and water supply from all of them was inconsistent. Available toilet facilities were pit latrine, W/C and buckets yet the nearby bushes were the most frequently used for emptying bowels. Number of student to toilet ratio was from 100:1 for all of the schools and there were no urinals for students. Olatunji and Thanny (2020) surveyed schools in Lagos State and reported that some schools did not have appropriate toilet

facilities and the ratio of number of students to toilet was more than 120:1. Similarly, the ratio of number of students to available washing hand basin was around 125:1. Soap was reported as being an almost non-available resource for hand-washing while hand sanitizer was only provided for students at the hand-washing point once. Balogun-Adeleye, Abiola and Agbaje-Daniels (2021) investigated 50 schools in Oyo State and found out that all of them had at least a toilet facility. The toilet facilities mostly found in the schools in descending order were traditional pit latrines, VIP and pour-flush. The number of students to toilet ratio ranged from 140:1 to 380:1 for the schools. 95% of the surveyed schools had water supply within their premises with 73% having wells and 22% having boreholes. For all of those having boreholes, water supply was very erratic thus being inadequate. There were no urinals in any of the schools.

Methodology

A mixed method design was utilised for the study and this was in order to ensure triangulation of collected data. The study was conducted in Calabar Education Zone of Cross River State. All 13,372 JSS2 and SSS2 students of all 86 public secondary schools in the zone formed the population. The sample (681 respondents) was drawn using a multi-stage, at first stage, purposive sampling approach was used to sample 6 schools out of the 86 public secondary schools in the study area. Simple random sampling technique was used at the second stage to draw 2 secondary schools for the sample size and this method was equally applied in obtaining the sample size for JSS2 (303) and SSS2 (311). Data collection was with a 14-item qualitative instrument titled WASH Interview Guide (WIG) and a 27-item quantitative instrument titled Checklist on Water, Sanitation/Hygiene and Environmental Sanitation (CWASHES). WIG was specifically responded to by 20% of the selected SSS2 students. Using Cronbach Alpha, the reliability of CWASHES was .78. Response rate was 90.1% (614 questionnaire copies). Qualitative data obtained was analysed using thematic analysis while quantitative data was analysed using descriptive statistics. The themes analysed in terms of the qualitative data were in line with the research questions.

Results

The demographics of the respondents revealed that JSS2 students were 303 while those for SSS2 were 311. As earlier stated, the qualitative data was specifically for 20% of the SSS2 respondents, thus there were 62 respondents for the qualitative data collection. Items 1 and 2 in WIG addressed research question one (availability and accessibility of safe drinking water in schools) while items 3 to 14 addressed research question two (extent of availability and accessibility of sanitation and hygiene resources/facilities). The summary of responses for items 1 and 2 revealed that most of the respondents were of the view that their schools had never provided a daily source of water since they started schooling in their schools. Very few of them asserted that their school actually provided a daily source. For those who asserted the provision of water, almost all of them said that it was tap water. Still on those who accepted provision of water in their school, they all stated that there has been no running water for some time now. This implying that drinking water is unavailable in almost all of the investigated schools based on the qualitative responses obtained.

For research question two, a summary of the responses for items 3 to 14 revealed that very few schools provided urinals for students and none of the urinals were gender sensitive. All of the few urinals provided had no roof and were considered as incomplete structures by the respondents.

Few schools were reported to have provided toilet facilities. The toilet facilities provided were W/C, VIP and pit latrines. Out of the few, some were gender sensitive while others were not. None of the toilets were reported as being consistently functional over time. According to most of the respondents, the consequence of the inconsistent functioning of the toilets was that resources such as water supply, tissue, soap, disinfectants and hand towels have not been available for use by the students. From the responses, what contributed to most of the few toilets provided cease being functional was lack of cleanliness for use. Most of the toilets were reported to have been housed in semi-complete structures with no doors and windows that could be shut, thereby implying that they were insecure.

Still on responses for items 3 to 14, waste baskets were provided for in most of the schools and students were responsible for emptying them when they were filled. For some, the waste baskets were usually emptied in dumpsters in proximity to their school while for some they were emptied in designated open dumps within their school premises. Hand washing facilities were provided for in schools with the types being hand washing basins and water buckets with taps. The responses appear to reveal that most schools kept their hand washing facilities by the school gate and at each classroom block. Finally from the qualitative responses, the water supply for schools that provide hand washing facilities appears to be somehow consistent but other resources for hand washing were reported as not being consistent.

For the quantitative responses, they are presented in Table 1 as follows.

Table 1: Results FOR Responses to Cwashes

S/N	Item	Response pattern with percentages in brackets
1.	Source of drinking water for students in school	Pipe borne water (3%) Borehole (6%) Well (4%) Spring (4%) Supplied bottle/sachet water (0) Surface water (river/pond/lake) (1%) Other (82%)
2.	Functional water supply source for students in school	Pipe borne water (4%) Borehole (7%) Well (4%) Spring (2%) Supply tanker (0) No functional water supply (84%)
3.	Availability of functional water supply for students in school	Always (1%) Often (2%) Rarely (2%) Never (8%) No available functional water supply (87%)

4.	Designated urinals for students' use in school	Yes (2%) No (98%)
5.	Gender sensitive urinals for Students	Yes (1%) No (99%)
6.	Structure of designated urinals for students in school	Has a door and windows, and can be locked (1%) No doors and windows but has walls (3%) An open space in surrounding bushes (0) Uncompleted buildings within school premises (0) Not available at all (96%)
7.	School's designated toilet facility for students	Pit toilet without cover (18%) Pit toilet with cover (3%) Ventilated improved pit latrine (5%) Pour-flush (8%) W/C (1%) None (65%)
8.	Functionality of school's designated toilet facility for students	Always (1%) Often (2%) Rarely (2%) Never (10%) No functional toilet facility (85%)
9.	Accessibility for use of school's designated toilet facility by students	Always (1%) Often (1%) Rarely (2%) Never (8%) None (88%)
10.	Gender sensitive toilet facilities designated for students	Yes (1%) No (99%)
11.	Availability of water supply for use in students' designated toilets	Always (0) Often (0) Rarely (2%) Never (98%)
12.	Availability of tissue for use in students' designated toilets	Always (0) Often (1%) Rarely (2%) Never (97%)
13.	Availability of soap for use in students' designated toilets	Always (0) Often (1%) Rarely (2%) Never (97%)
14.	Availability of hand towels for use in students' designated toilets	Always (0) Often (0) Rarely (2%)

		Never (98%)
15.	Availability of disinfectants for use in students' designated toilets	Always (0) Often (0) Rarely (1%) Never (99%)
16.	Disinfectants are usually used to disinfect students' designated toilets	Yes (0) No (4) No toilet to disinfect (96%)
17.	Cleanliness of students' designated toilets	Always (0) Often (0) Rarely (1%) Never (3%) No toilet to clean (97%)
18.	Frequency of cleaning students' designated toilets	Once weekly (0) Twice weekly (0) Thrice weekly (0) More than thrice weekly (0) No toilet to clean (100%)
19.	Security of students' designated toilet facility	Always (0) Often (0) Rarely (1%) Never (3%) No toilet to keep secure (96%)
20.	Structure of designated toilet facility for students	Has a door and windows, and can be locked (1%) No doors and windows but has walls (4%) An open space in surrounding bushes (0) Uncompleted buildings within school premises (0) Not available at all (95%)
21.	Spots where designated waste baskets for students are kept to dispose waste in school	Classrooms (6%) Strategically around classroom blocks (28%) Not available at all (66%)
22.	Emptying of students' designated waste baskets when filled	Regularly (22%) Often left unattended (7%) No waste baskets for students (71%)
23.	Type of designated hand washing facility for students in school	Sinks with running tap water (2%) Water buckets with tap (67%) Hand washing basins (22%) Nothing at all (9%)
24.	Spots where designated hand washing facility for students are kept in school	At students' toilet/latrine (0) At school's running water source (2%) In classrooms (4%) Strategically around classroom blocks (56%)

		Not available at all (38%)
25.	Resources always provided for students to wash hands	Water only (52%) Water and soap (15%) Water and ashes (0) Water and sand/soil (0) Nothing at all (33%)
26.	Soap always provided for students in school to wash hands	Bar soap (9%) Liquid soap (8%) Powder detergent (0) Soapy water (13%) Nothing at all (70%)
27.	At every designated hand washing spot in school, there	Is a hand towel (1%) Is no hand towel (99%) Are selected hand washing spots with hand towels (0)

Discussion

The first research question addressed the extent to which safe drinking water was available and accessible in schools. Starting with the qualitative responses, it was revealed that there was no available and accessible safe drinking water for students in most of the schools. For those whose schools provided safe drinking water, the extent of its inconsistency of supply was as good as being unavailable and accessible in such schools. For the quantitative responses, more than 80% of the respondents indicated that safe drinking water was unavailable and non-accessible in schools. This finding seems to be backed by those of Olukanni (2013), Ugboma *et al*., (2018), Ohwo (2019) and, Ojukwu and Chukwu-Okeah (2020) who all revealed the extent which safe drinking water was unavailable and non-accessible in schools.

The second research question addressed the extent which sanitation and hygiene resources/facilities were available and accessible in schools. A summary of the qualitative responses indicated the following – (i) very few schools provided urinals for students and none of the provided urinals were gender sensitive; (ii) few schools were reported to have provided toilet facilities and none of the toilets were reported as being consistently functional over time; (iii) resources such as water supply, tissue, soap, disinfectants and hand towels have not been available for use by the students in their toilets; (iv) waste baskets were provided for in most of the schools and it was students' responsibility to empty them when filled, and; (v) hand washing facilities were provided for in most schools with the types being hand washing basins and water buckets with taps. The finding here seems to affirm those of Egbinola and Amanambu (2015), Alafin *et al*., (2019) Ejimogu *et al*., (2019), Inah *et al*., (2020) and Balogun-Adeleye *et al*., (2021).

Conclusion

The study's finding revealed the extent of unavailability and non-accessibility of safe drinking water and, sanitation and hygiene resources/facilities for the WASH Programme implementation in schools in the investigated area. Based on the finding, the immediate poser that comes to mind is whether the goals of the PEWASH programme in Cross River State secondary schools would be attainable by the timeframe given. In addition, with the current incidences of COVID-19

occurring endlessly, non-exposure of secondary school students to hygiene-based resources and facilities could serve to hinder their practical understanding of the need to observe utmost hygiene in their future.

Recommendations

The following recommendations were made from the results of the findings.

Emphasis should be laid by schools to ensure that safe drinking water is made available and accessible to students in schools, Schools should seek for sponsorship/partnerships to have functional sanitation and hygiene resources/facilities for students' utilisation in schools, Consistent research should be conducted on schools in order to assist the WASH Programme towards attainment of their set goals and objectives

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