

## EMERGENCY PREPAREDNESS IN SCHOOL HEALTH SERVICES: A STUDY OF SECONDARY SCHOOLS IN LAGOS, NIGERIA

Onwuama, Mercy. A.C.\* , Owolabi, Habeeb L. \*\*,  
Ajibola, Gbenga S.\* and Owolewa, Musiliu\*

*\*Department of Human Kinetics and Health Education,  
University of Lagos, Akoka, Lagos State, Nigeria*

*\*\*Department of Human Kinetics and Health Education,  
Lagos State University of Education, Oto/Ijanikin, Lagos State, Nigeria.*

### Abstract

*School environments are expected to offer safety and promote the well-being of students. However, increasing reports of health-related emergencies in Nigerian schools such as student collapses, seizures, injuries and sudden deaths have raised concerns about institutional preparedness. This study assessed the level of emergency preparedness in selected public secondary schools in Lagos State, Nigeria. A cross-sectional descriptive survey design was employed, and data were collected from 54 teaching and non-teaching staff across six schools in Makoko, Iwaya, Mushin, and Idi-Araba. A pre-tested and validated questionnaire (Cronbach's alpha  $r = 0.75$ ) was used to assess knowledge, attitudes, and availability of emergency response facilities. Descriptive statistics were applied to analyze the data. Findings revealed that while 88.9% of respondents were aware of common school emergencies, primarily through social media (85.2%), only 9.3% had received formal training in first aid or emergency response. Participation in safety drills was low, with 77.8% of respondents having never engaged in such exercises. Furthermore, 81.5% of the schools lacked functional sickbays, none had oxygen cylinders, and over half of the first aid boxes were poorly equipped. Despite these gaps, a majority of staff expressed willingness to participate in future emergency training programmes. The study concludes that although awareness of emergencies is high, actual preparedness remains critically low. The lack of equipment, training, and policy implementation pose a significant risk to student safety. The study recommends mandatory training for all school personnel, provision of emergency tools, and the enforcement of Nigeria's National School Health Policy by the School health professionals Association of Nigeria (SHEPAN).*

### Introduction

A school serves double functions in educating students while becoming the fundamental force that shapes their safety, development and overall wellness. Argument from the World Health Organization (WHO, 2020) confirms that school health programmes serve as both protectors of healthy behaviours along with disease prevention instruments while creating

conducive learning environments. The Nigerian school health service integration derives its guidance from the National School Health Policy issued by the Federal Ministry of Health (2006) to provide basic medical services and emergency care and health education programmes in educational facilities across the country.

The desired policies for school healthcare remain unfulfilled because Nigerian schools generally lack crucial facilities, provisions and qualified emergency personnel. The readiness of educational establishments to handle medical and safety crises covers fundamental injuries like fractures together with bleeding issues and critical situations like seizures and cardiac arrests and fire emergencies (Onwuama & Azenabor, 2017). School emergencies demand immediate collaborative actions from prepared staff members who have suitable first aid equipment together with established operational procedures.

The Primary Health Care (PHC) system considers school health services as its fundamental component worldwide. Benes and Alperin (2022) indicate that a total school health programme consists of three main operational elements which include healthful school living, school health instruction and school health service delivery. According to Onwuama and Obioha (2011) developing countries benefit from using schools as strategic locations for health education while conducting early intervention programmes.

Educational institutions across Nigeria mostly fail to implement school health policies as a whole or maintain consistent health policy execution particularly in public secondary educational institutions. Research data shows that teachers along with school personnel lack awareness about standard emergency protocols while most institutions run without essential medical facilities (Adesegun et al., 2019). Students face substantial danger because of inadequate disaster response preparedness in Lagos's heavily populated urban areas where schools are heavily subscribed. An examination of emergency preparedness measures exists for selected secondary educational institutions throughout Lagos State Nigeria is the primary purpose of this research. The research determines how well-educated and equipped staff members of selected schools understand emergency protocols through training initiatives. Policy makers need this research to generate proper intervention solutions which enhance emergency preparedness in schools.

## 2. Statement of the Problem

Education facilities are recognised as secure institutions with systematic organization. Recent accidents in Nigeria's educational facilities have weakened public confidence regarding school emergency preparedness (Owolabi & Ayoade, 2024). School emergency preparedness and response systems need improvement as shown by the fatal collapse of a 12-year-old student during an inter-house sports competition in Lagos and a student getting electrocuted inside university grounds (Daily Post, 2023; Punch, 2016). The fatal accidents occurring at school basically challenge the ability of educational institutions to uphold their duties toward students according to the loco parentis doctrine which requires schools to protect students' health throughout the scholastic days (Agbaje et al., 2023). According to Doyle et al.'s (2024) schools need to establish readiness for any emergency event from natural disasters to medical problems and activities-based accidents.

Studies across Nigeria and other countries with similar economic status have repeatedly shown that schools demonstrate inadequate readiness in handling emergency situations. Onwuama and Azenabor (2017) demonstrated through research that nursing

personnel in Lagos tertiary institutions demonstrated insufficient disaster response training while most emergency response guidelines were either undeveloped or improperly executed. Adebayo and Onadeko (2015) found that Southwest Nigerian public secondary schools do not have trained health staff or working sickrooms or established emergency plans.

Despite the existence of the National School Health Policy, governments has fail to implement it effectively while funding rschool health services remains inadequate (Federal Ministry of Health, 2006). School children continue to face dangerous health outcomes because policies are not effectively implemented in practice.

The state of emergency preparedness in Nigerian schools needs systematic investigation due to existing circumstances. The research targets specified secondary educational facilities throughout Lagos State since this section of Nigeria presents a crucial environment for understanding these emergency preparedness issues because of its dense population and strained infrastructure.

### **Methodology**

This study employed a cross-sectional descriptive survey design to assess the level of emergency preparedness in secondary schools in Lagos State, Nigeria. A descriptive approach was appropriate for this study as it allows for the collection of data at a single point in time to explore and describe the current conditions and attitudes of school staff regarding emergency preparedness (Creswell and Creswell, 2017). The design was chosen to gain insights into knowledge, attitudes, and availability of emergency tools and services within schools, without manipulating any variables.

The research was conducted in six public and private secondary schools located in Makoko, Iwaya, Mushin, and Idi-Araba urban communities within Lagos State, Nigeria. These areas were purposively selected due to their population density, infrastructural limitations, and proximity to health facilities. Lagos, being the most populous state in Nigeria, provides a critical context where school safety and health services face significant challenges due to overcrowding and limited resources (Afolabi & Ilesanmi, 2017). The convenience sampling technique was adopted due to the accessibility and willingness of participants at the selected schools. Although not probabilistic, convenience sampling was deemed suitable for exploratory studies aimed at identifying trends and informing future interventions (Etikan et al., 2016).

A total of six (6) secondary schools were selected, with 54 staff members (teaching and non-teaching) participating in the study.

**Table 1: Distribution of respondents by school location**

S/N	School Name	Location	No. of Staff
1	Emma El-Shaddai Secondary School(Private school)	Makoko	4
2	Idiaraba Junior Secondary School	Idiaraba	10
3	Mushin Junior High School	Mushin	10
4	Idiaraba Senior High School	Idiaraba	10
5	Mushin Senior High School	Mushin	10
6	Eletu Odibo Senior High School	Iwaya	10
<b>Total</b>			<b>54</b>

Data were collected using a validated questionnaire developed by the researchers. The instrument yielded a Cronbach's alpha value of  $\alpha = 0.75$ , indicating acceptable reliability. Quantitative data were subjected to descriptive statistics such as frequencies and percentages while open-ended questions were subjected to content analysis, identifying recurring themes and patterns in participants' experiences and perceptions regarding emergency preparedness.

### Results

This section presents the findings from the data collected from 54 staff members across six public secondary schools in Lagos State. The results are categorised into four key domains: demographic characteristics, knowledge of emergencies, attitudes toward emergency preparedness, and availability of emergency tools and services.

A total of 54 respondents participated in the study, comprising both teaching and non-teaching staff.

**Table 2: Knowledge and training on emergencies**

Item	Response	Frequency (n)	Percentage (%)
Heard about emergency situations in schools	Yes	48	88.9%
	No/Not Sure	6	11.1%
Source of information	Social Media	46	85.2%
	Students	8	14.8%
Received training on first aid/emergency care	Yes	5	9.3%
	No	49	90.7%

While general awareness of emergencies is high, the lack of structured or institutionalised training represents a critical gap in preparedness. Table 3 showed that the majority of respondents were aware of the types of medical and safety emergencies that may occur in schools. However, this awareness did not translate into training or preparedness. A significant majority of respondents (88.9%) indicated that they had heard about emergency situations occurring in school settings. When asked about their sources of information, 85.2% of the participants reported that social media was their primary channel for learning about such incidents. Despite this high level of awareness, only 9.3% of the respondents had received any formal training in first aid or emergency care. Notably, those with training were predominantly physical health education teachers or members of the Red Cross.

**Table 3: Attitude and participation in training**

Item	Response	Frequency (n)	Percentage (%)
Willing to attend First Aid/emergency training	Yes	44	81.5%
	No	10	18.5%
Participated in safety/emergency drills before	Yes	12	22.2%
	No	42	77.8%

Despite low participation rates, a large proportion of staff expressed a willingness to undergo emergency preparedness training, signaling an opportunity for capacity-building interventions. Table 3 indicated that the respondents showed a limited level of commitment to or experience with emergency preparedness training. A significant majority 81.5% (44 individuals) reported that they had never attended a first aid training session or workshop. Additionally, only 22.2% (12 individuals) indicated that they had ever taken part in safety drills within the school environment.

**Table 4: Availability and adequacy of emergency facilities**

Item	Response	Frequency (n)	Percentage (%)
Functional sickbay in school	Yes	10	18.5%
	No	44	81.5%
Sickbay equipped with oxygen cylinders	No	54	100%
First aid box availability and quality	Poor	30	55.6%
	Average	24	44.4%
Availability of school nurse or medical personnel	Yes	36	66.7%

	No	18	33.3%
Preferred referral center for emergencies	General Hospital	48	88.9%
	Private Hospital	6	11.1%

Table 4 showed that a critical aspect of this study involved evaluating whether schools were adequately prepared to manage emergencies, and the results raised several concerns. Only 18.5% (10 respondents) confirmed that their school had a functional sickbay. Alarming, all respondents (100%,  $n = 54$ ) reported that their school's sickbay lacked oxygen cylinders. Furthermore, 55.6% (30 respondents) rated their school's first aid box as "poorly equipped." While 66.7% (36 respondents) indicated that their schools had access to a school nurse or medical doctor, 88.9% (48 respondents) noted that emergency cases were typically referred to general hospitals. This highlights a significant reliance on external healthcare services to manage school-based emergencies.

### **Content analysis of open-ended responses**

Qualitative responses to the open-ended questions revealed several recurring themes. A dominant theme was the lack of institutional support, where many respondents expressed frustration about the absence of basic emergency facilities and training opportunities. Another common theme was self-reliance, with several staff stating they had taken it upon themselves to learn basic first aid through informal means such as YouTube videos or Red Cross handbooks. Some participants also mentioned a sense of vulnerability, expressing fear that in the event of a serious emergency, the school would not be able to respond adequately. Finally, a number of respondents recommended mandatory training and regular drills as a way to build confidence and ensure readiness. These themes reinforced the quantitative findings and emphasised the emotional and professional burden placed on untrained staff in emergency situations.

### **Discussion of findings**

The findings from this study highlight a critical gap between emergency awareness and actual preparedness in public secondary schools in Lagos State. Although the majority of school staff (88.9%) reported awareness of common emergencies such as injuries, seizures, and fainting/collapses this knowledge did not correspond with sufficient training or infrastructure for an effective response. Only 9.3% of participants had received any form of emergency or first aid training, a figure that is alarmingly low given their loco parentis responsibilities. These findings mirror those of Adesegun et al. (2019), who reported similar trends in other Nigerian states where school staff lacked both basic life-saving knowledge and access to emergency kits. The absence of structured emergency drills or refresher programs observed in this study (with 77.8% of staff never participating in such activities) further compounds the problem and exposes students to avoidable risks.

The attitudinal data, however, presents a glimmer of hope. A significant number of respondents (81.5%) expressed willingness to attend emergency preparedness training if

given the opportunity. This suggests that while structural and policy failures exist, the human resource capacity remains a fertile ground for improvement if proper policies and training interventions are instituted (Owolabi et al., 2024).

The lack of functional sickbays and emergency equipment, such as oxygen cylinders and adequately stocked first aid boxes, reinforces the systemic challenges in implementing the National School Health Policy (Federal Ministry of Health, 2006). According to Adebayo and Onadeko (2015), the disconnection between health policy formulation and implementation in Nigerian schools often results from poor funding, lack of enforcement mechanisms, and insufficient stakeholder engagement.

Further, the dependence on external healthcare facilities 88.9% of emergency cases are referred to general hospitals underscores a reactive rather than proactive approach to school health emergencies. This delay can lead to irreversible consequences in time-sensitive emergencies like cardiac arrest, asthma attacks, and seizures (Doyle et al., 2024).

The findings also resonate with Onwuama and Azenabor (2017), who noted that even tertiary institutions in Lagos suffered from similar issues of untrained staff and inadequate disaster preparedness infrastructure. This suggests that the lack of emergency readiness is systemic across all educational levels, not merely an issue within secondary schools.

## Conclusion

In the study, secondary schools in the study area required complete emergency-preparedness system improvements without delay. Staff members demonstrate reasonable awareness of health emergencies yet fail to create preparedness initiatives because they lack proper training together with vital facilities and insufficient performance of established policies.

The reported missing equipment including operational sickbays alongside empty oxygen cylinders and first aid supply deficiencies in combination with inadequate safety drill exposure constitutes serious public health threats to student life.

The research results emphasised three key requirements:

1. Mandatory and continuous training in emergency management for all school staff.
2. The administration must enforce the National School Health Policy through its inspection activities and offer financial support.
3. The establishment of functional clinics with trained health personnel in every school.
4. Every school needs to deploy standardised emergency preparedness exercises as part of their organizational practices so their teams can master responding to different crises.
5. Educational institutions need proper attention to critical issues which would enhance their role in national health initiatives alongside educational development goals.



The following recommendations were made :

1. Public education institutions must establish operative sickbays across their facilities through government enforcement of this policy.
2. Every school employee needs to receive necessary first aid and emergency preparation training that is required as part of their duties.
3. Each school facility needs to install two components of emergency equipment: oxygen cylinders and automated external defibrillators (AEDs).
4. School organizations must execute safety drills with regular frequency to build readiness among their community.

## References

- Adebayo, A. M., & Onadeko, M. O. (2015). Knowledge of school health programme among public primary school teachers in Oyo State, South-Western Nigeria: a rural-urban comparative study. *African Journal of Reproductive Health*, 19(3), 55-60.
- Adesegun, O., Alafin, B., Da'Costa, A., Idowu, A. O., Osonuga, A., Ajiro, T., ... & Alakija, W. (2019). Poor Practice of First-Aid among Secondary School Students: A Pointer To Poor Emergency Preparedness and Services in Nigeria. *World J Med Sci*, 16(3), 107-115.
- Agbaje, O. S., Ozoemena, E. L., & Agu, B. N. (2023). Integrating health protection and school health programme for effective emergencies preparedness and responses in Nigerian education sector. *Nigerian Journal of Health Promotion*, 16(1).
- Benes, S., & Alperin, H. (2022). *The essentials of teaching health education: Curriculum, instruction, and assessment*. Human Kinetics.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Daily Post. (2023, Feb 13). *Lagos student slumps, dies during sports*. <https://dailytrust.com/lagos-student-slumps-dies-during-sports/>
- Doyle, K., Pascoe, E., Donnarumma, S., Anderson, M., Stoyke, K., McDaid, D., ... & Short, M. (2024). A transnational student-led, rural-focussed inquiry: social work educational competency in disaster management. *Social Work Education*, 43(8), 2318-2339.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Federal Ministry of Health. (2006). *National school health policy*. Abuja.
- Onwuama, M. A. C., & Azenabor, L. A. (2017). Disaster preparedness and response to emergency situations by nursing staff in tertiary institutions in Lagos State. *Journal of Nigeria School Health*, 29(2), 1-8.
- Onwuama, M., & Obioha, C. (2011). Assessing strategies of school health programme as a tool for quality primary health care goals in secondary schools in Federal Capital Territory, Abuja. *Journal of Nigeria School Health*, 23(1), 54-65.



- Owolabi, H., Ayoade, T., Adesola, B., & Adeniyi, A. (2024). Stakeholders engagement on effective implementation of focusing resources on effective school health (FRESH) initiative in Nigeria. *Ilorin Journal of Education*, 44(1), 195-207.
- Owolabi, H.L., & Ayoade, T.O. (2024). Electrical safety management practices and its influence on the incidence of accidents in public secondary schools in Lagos State. *Nigerian School Health Journal*, 36(2), 117-127
- Punch. (2016, May 24). *Electrocuted UNILAG undergraduate's family gets N45m compensation*. <https://punchng.com/electrocuted-unilag-undergraduates-family-gets-n45m-compensation/>
- World Health Organization. (2020). *Global standards for health-promoting schools*. WHO Press.