

Status and Factors Influencing Practice of First Aid Services Among Selected Secondary Schools Teachers in Ojodu Berger, Lagos, Nigeria

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Abstract:

The use of first aid in schools is essential as injuries often occur. Teachers, in particular can contribute to first aid delivery since they are closely engaged with the students. Hence, this study investigated the status and factors influencing practice of first aid services among secondary school teachers in Ojodu Berger, Lagos, Nigeria. The study employed descriptive cross-sectional design. Two hundred and sixteen teachers were selected through stratified sampling technique Reliability of the instrument was determined using Cronbach's alpha to ensure internal consistency of the instrument. Thus, Cronbach's alpha value was 0.852. Data collected were analyzed using descriptive statistics to answer the research questions. The results revealed that majority of the respondents 214(99.1%) had good knowledge of first aid. The total mean score for knowledge was 4.8 ± 0.52 . Less than half 198(91.7%) of the respondents had a positive attitude towards status and practice of first aid. The total mean score for attitude was 12.20 ± 0.14 Majority 210(97.2%) of the respondents had adequate enabling factors that discourage the promotion of first aid practice. The total mean score for enabling factor was 12.32 ± 2.29 . The study concluded that the respondents had a high level of knowledge of first aid and positive attitude towards first aid. The enabling factors such as first aid kit,

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safe and secure environment were lacking. The study recommends that more awareness and proper training is needed to help inform and equip teachers on the need to show positive attitude towards first aid victims. Also school administrators should provide adequate first aid kits.

Keywords: Knowledge, Attitude, Enabling Factors, Practice, First Aid Services,



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Introduction

School children (6-14 years of age) make up approximately 23% of the average population and their state of health reflects the growth of the Nigerian community (Akani, et al, 2001). The school, in direct contact with 95% of the young people (age 5-17), about 6 hours a day and up to 13 years of critical life in Nigeria (Ademokun, et al, 2014), is a place where children can experience ill health or injuries from a variety of sources such as a playground, sports, and transit facilities (Sapien, & Allen, 2001). The inadequacy of the services of school health can hinder access to health services which can lead to health effects, including death (Ogunkunle, et al., 2014; Kuponiyi, et al., 2016).

First Aid is a drug-less practice designed to save lives or prevent the situation from getting worse until helped by a health worker in a situation where any accident or life threatening situation occurs (Kirilmaz, 2016). The conscious first aid to be done in such a situation would reduce the deaths by 20%, as well as increase the success of treatment in a treatment institution (Dundar, 2019). Human beings may meet at any time with situations that require first aid throughout their lives. It is possible to save lives with first aid which is a simple but effective and important application which is made in a timely manner. First aid information should first give the individual the vital help he or she will make to the environment of the individual (Cakircali, 2017).

As a result of adequate/lack of first aid materials in schools, first aid in schools states that first aid training to pupils teaches them to care for others, equipping them with skills to be the difference between a life lost and a life saved, inside the school gates and beyond. First aid is referred to by Ajimon (2019) as help given to injured person before medical treatment is usually given. Webster (2021) defined first aid it as an emergency care or treatment given to a sick or injured person before regular medical aid can be obtained while Joseph et al (2015) sees it as an emergency treatment for an ill person ahead of surgical or medical treatment. First aid is important in ensuring that injured or sick person access necessary medical help before a trained medical personnel attend to such patient to administer more specialized service.

There is a growing body of knowledge that believes that school do not have adequate provision for first aid as many schools do not have adequate facility and materials to help them administer first aid treatment. Adedeji (2017) asserted that first aid can be helpful in securing safety and life as injured or sick students can be efficiently and promptly attended to before any professional treatment can be administered. In some other circumstances, Bollig, et al (2011) argues that such first aid treatment might be the only treatment that students receive as they may not even bother to go to professional doctor for further treatment. Obitoye (2019) opined that many students receive only first aid treatment in cases of minor and major injuries as they often keep some information away from their parents, citing injuries like fracture, twisted wrists, broken toe, broken tooth, muscle injuries, cramps, hamstring, knee injuries, knock, groin, calf, concussion and so on as injuries that do not sometimes get the attention of the parents.

Unintended accidents are the leading cause of death for children aged 1-19 years in developed countries like the United States, accounting for near 37 percent of all deaths in children after the age of one year (CDC Childhood Injury Report, Child Safety and Injury



Prevention, CDC Injury Centre, 2019). Up to a quarter of accidents are estimated among school children as normal school-aged children spend 28 percent of the day and 14 percent of their overall annual time in school (Sapien, & Allen, 2001). Commonly recorded playground injuries include abrasions, contusions, sprains, dislocations, lacerations, and fractures among school children (Frost, 1995)

Seizure, snake bites, road injuries, and diarrhea diseases are more prevalent in developing countries and also occur in sub-Saharan Africa (Ruiz-Casares, 2009). Data on the injury profile of school children in Nigerian schools are scarce. Many schools in Nigeria lack resources from qualified health staff or first-aid workers, although some schools provide vital medicines and first aid facilities (Ogunkunle, et al, 2014; Kuponiyi, et al, 2016). In view of school children's common injuries, previous studies indicate that first aid skills, attitude and practice are poor (Kumar et al., 2013; Santagati, et al, 2016).

With many schools without roof, seats, chalk board and other facilities required for effective teaching and learning, the researcher doubts such schools that struggle to possess these basic facilities will have first aid kits to provide adequate treatment for students before getting professional treatment. Few studies addressing the importance of first aid in terms of status, knowledge and practice in Nigerian secondary schools have been conducted. Having stated all the above, there is need to investigate the status and factors influencing the practice of first aid services in secondary schools in Lagos State, Nigeria.

In view of the above, this study specifically:

1. assessed the personal predisposing (knowledge and attitude), factors that are associated with the practice of first aid services by secondary school teaching staff;
2. determined the enabling factors (availability of first aid kit, student medical history and safe school environment) that influence the practice of first aid services by secondary school teaching staff; and
3. examined the practice of first aid service among secondary school teaching staff.

Research Questions

The following research questions were raised for this study:

1. What are the personal predisposing (knowledge and attitude), factors that are associated with the practice of first aid services by secondary school teaching staff in Ojodu Berger, Lagos state, Nigeria?
2. What are the enabling factors (availability of first aid kit, student medical history and safe school environment) that influence the practice of first aid services by secondary school teaching staff in Ojodu Berger, Lagos, Nigeria?
3. What is the practice of first aid service among secondary school teaching staff in Ojodu Berger?

Methodology

The cross-sectional study design was utilized in this study. The population for this study comprises of teaching staffs from secondary schools within Ojodu Berger Area in Ojodu Local Development Area (LCDA) in Lagos State. This study sampled a total of two hundred and sixteen (216) staff. Multi-stage sampling technique was utilized for this study. The secondary schools in Ojodu Berger were categorized into private and public. A semi structured questionnaire developed by the researcher was used as the instrument for obtaining



information from respondents. The instrument was subjected to face and content validity by experts of Health Education. Reliability of the instrument was determined using Cronbach's alpha to ensure internal consistency of the instrument. Thus, Cronbach's alpha value was 0.852. Copies of questionnaire were coded and analysed using SPSS Version 27. Descriptive statistics such as frequency, percentages, and mean were used to answer all research questions.

Results

Research Question 1: What are the personal predisposing (knowledge and attitude) factors that are associated with the practice of first aid services by secondary school teaching staff in Ojodu Berger, Lagos state, Nigeria?

Table 1: Knowledge of Respondents' regarding predisposing practice to first aid

Items	Respondents in this study=216	
	Frequency(n)	Percent (%)
First aid should be administered immediately after occurrence of an injury/illness?	214	99.1
First aid does not completely eliminate the pain of an injured or ill person?	213	98.6
First aid is best carried out by trained personnel?	208	96.3
Surgeries should not be performed during first aid?	204	94.4
There is need for medical check-up after receiving first aid?	215	99.5

In table 1, almost all 214(99.1%) of the respondents knew that first aid should be administered immediately after the occurrence of an injury. Majority 213(98.6%) of the respondents agreed that first aid does not completely eliminate pain. Most 208(96.3%) of the respondents were cognizant of the fact that first aid is best carried out by trained personnel while majority 204(94.4%) of the respondents concurred that surgeries should not be performed during first aid. Most 215 (99.5%) of the respondent believed that there is need for medical check-up after receiving first aid.

Table 2: Summary of knowledge of respondents' regarding predisposing practice to first aid

Variable	Respondents in this study; N=216 $\bar{x} = 4.8 \pm 0.52$	
	Frequency	Percentage (%)
Poor	2	0.9
Good	214	99.1

Table 2 shows that majority of the respondents had 214 (99.1%) good knowledge of first aid

Table 3: Attitude of respondents towards predisposing practice of first aid

Statement	Strongly Agree F (%)	Agree F (%)	Disagree F (%)	Strongly Disagree F (%)
If I come across an injured or ill person, I will help that person through my knowledge of first aid.	90(41.7)	75(34.7)	30(13.9)	21(9.7)
Knowing first aid is very beneficial because it could help save a life.	123(56.9)	80(37.0)	6(2.8)	7(3.2)
I would like first aid to include in the school curriculum.	113(52.3)	92(42.6)	6(2.8)	5(2.3)
Learning first aid is a hard task.	31(14.4)	43(19.9)	73(33.8)	69(31.9)
First aid knowledge is only necessary for: Doctors, Nurses, and other health workers	10(4.6)	23(10.6)	81(37.5)	102(47.2)
Giving first aid in schools in very good.	120(55.6)	78(36.1)	10(4.6)	8(3.7)

In table 3, a little less than half 90(41.7%) of the respondents strongly agreed that when they come across an injured or ill person that they will help through their knowledge of first aid. More than half 123(56.9%) of the respondents strongly agreed that knowing first aid is very beneficial because it could help save life, also more than half 113(52.3%) of the respondents strongly agreed that they would like first aid to be included in the school curriculum. Less than half 69(31.9%) were correct to have strongly agreed that learning first aid is difficult. A little less than half 102(47.2%) were right to have disregarded the statement that 'first aid knowledge is only necessary for Doctors Nurses and other health workers. A good number 120(55.6%) of the respondents are of the strong opinion that giving first aid in schools is good



Table 4: Respondents Attitude towards Status and Practices of First Aid

Variable	Respondents in this study; N=216		In table 4, their attitude proportional score was categorized into negative and positive. A little less than half
	Frequency	Percentage (%)	
Negative	18	8.3	
Positive	198	91.7	

105(48.6%) of the respondents had a positive attitude towards first aid. While, half 108(50.0%) of the respondents had moderate attitudinal disposition towards status and practice of first aid

Research Question 2: What are the enabling factors (availability of first aid kit, student medical history and safe school environment) that influence the practice of first aide services by secondary school teaching staffs in Ojodu Berger, Lagos, Nigeria?

Table 5: Enabling Factors That Promote/Discourage First Aid Practices

Statements	Strongly disagree F (%)	Disagree F (%)	Agree F (%)	Strongly agree F (%)
Students should be encouraged to report all injuries/illnesses.	97(44.9)	102 (47.2)	14(6.5)	3(1.4)
There should be adequate number of first aid kit provided within the school premises.	1(0.5)	7(0.1)	75(34.7)	133(61.6)
Parent should provide important medical history about their ward.	2(0.9)	10(4.6)	97(44.9)	107(49.5)
The school environment should be safe to reduce number of possible casualties.	00	2(0.9)	69(31.9)	145(67.1)
Student and other staff should be encouraged to patronize first aid services within the school when necessary.	4(1.9)	17(7.9)	104(48.1)	91(42.1)



In table 5, less than half 97(44.9%) strongly disagreed that students should be encouraged to report all injuries/illnesses. More than half 145 (67.1%) of the respondents are in strong agreement that the school environment should be safe to reduce number of possible casualties. A little less than half 91(42.1%) of the respondents are in strong congruence with the statement 'that students and staff should be encouraged to patronize first aid services within the school when necessary'. Some 107(49.5%) of the respondents, strongly agreed that parent should provide important medical history about their ward. More than half 133 (61.6%) strongly agreed that there should be adequate number of first aid kit provided within the school premises.

Table 6: Enabling Factors That Promote /Discourage First Aid Practices

Respondents in this study; N=216 $\bar{x} = 12.32 \pm 2.29$		
	Frequency	Percentage (%)
Poor	6	2.8
Good	210	97.2

Table 6 shows the respondents' enabling factors that promote/discourages first aid practice, measured on a 15-point rating scale showed a mean score of 12.32 ± 2.29 . Their enabling factors score was categorized into poor and good. Majority 210 (97.2%) of the respondents had good enabling factors that discourages the promotion of first aid practice while only a small proportion 6 (2.8%) having low enabling factors.

Research Question 3: What is the practice of first aid service among secondary school teaching staff in Ojodu Berger?

Table 7: Respondents Practice of First Aid

Items	Respondents in this study=216	
	Frequency(N)	Percent (%)
When a student is injured or ill, first aid is administered	140	64.8
The first aiders discourage overcrowding while administering first aid?	83	38.4
The first aiders are usually calm and composed during emergencies?	91	42.1
First aiders request for assistance when necessary e.g calling an ambulance, supporting an injured person to maintain the right position.	63	29.2
First aiders persuade sick or injured persons that he or	111	51.4



she will get better?

After administering first aid, the school admonish students to seek medical check up	120	55.6
First aiders request for utmost cooperation of the victim during emergencies	83	38.4

In table 7, most of the respondents confirmed that first aid is administered when a student is ill or injured. Less than half 83(38.4%) of the respondents said first aiders discourage overcrowding while administering first aid. Less than half also confirmed that first aiders were usually calm and composed during emergencies. Of the respondent that administered first aid, less than half 63(29.2%) of the respondent requested for assistance like calling an ambulance. More than half (51.4%) persuaded the sick or injured persons that they would get better. More than half 120(55.6%), said the school admonish students to seek medical check-up after receiving first aid. Less than half 83(38.4%) requested for utmost cooperation from the victim during emergencies

Table 8: Proportion of Respondents Practice of First Aid

	Respondents in this study; N=216 \bar{x} = 3.8±1.97	
	Frequency	Percentage (%)
Poor	95	44.0
Good	121	56.0

In table 7, respondents' practice of first aid, measured on a 7-point rating scale showed a mean score of 3.80±1.91. The practice score was grouped into poor and good. More than half 121(56.0%) had good practice of first aid while the remaining respondents 95(44.0%) had poor practice of first aid

Discussion

The findings from this research showed that almost all the teachers who participated in the study will immediately administer first aid to an injured person. When further enquiry was made concerning first aid, majority of the respondents gave a satisfactory response. The majority of the respondents were knowledgeable about the topic. This was at variance with the study in Egypt where the mean score was found to be low (Abdella et al., 2015). It is also in contrast to the finding of a study in U.S, Midwestern states that indicated that teachers have deficient knowledge of emergency care and basic life support modalities (Gagliardi, et al, 1994). The finding of the study also was different to a study that was carried out in Abha City, Kingdom of Saudi Arabia (Awad, et al., 2015). The difference in results may be due to different study location.

In this study half of the respondents had positive attitudinal disposition towards first aid. This is in line with Abulhamail et al (2014) who showed in his study, that teachers with good knowledge were less likely to have negative attitudes. This study was in line with another study from India who reported that 58% of the participants were confident and



willing to provide assistance. Pallavisarji et al (2013). This study was also in contrast to a study done in China where majority of participant had positive attitude for first aid.

Most respondents agreed that giving first aid was helpful; the vast majority believe the importance and usefulness of learning first aid. This result is in line with the study done in Shanghai, China, in which majority of the participants felt the importance of providing first aid and learning first aid Li et al (2012). This study was also different from a study from Ethiopia, 88% of the drivers in the study were not confident to render first aid as they had inadequate knowledge (Alemshet & Zewdie, 2017).

Though, the current study revealed respondents exhibited a positive attitude towards first aid, it was not significantly associated with the practice of first aid. This was in conformity to a study carried out in Nigeria amongst taxi drivers where their attitude did not impact their practice (Sangowawa & Owoaje, 2012). This could be because respondents did not receive any form of first aid training and felt their knowledge was not adequate enough to provide first aid and refrained from providing first aid to a car accident victim Nevertheless, respondents' first aid applications considerably increased after the first aid training in Ghanaian study reported by Sunday et al (2012).

Conclusion

The study concludes that the participants had a high level of knowledge about status and factors affecting practice of first aid. In spite of the good knowledge recorded amongst the respondents, their attitude towards first aid was moderate this was as a result of the enabling factors such as first aid kit, safe and secure environment. Respondents, agreed that if such factors were to be available this might positively impact their attitude towards first aid services.

Recommendations

- Based on the findings of this study the following are therefore recommended;
1. This study recommends that school authorities should ensure provision of adequate first aid kits.
 2. There is need for increase awareness and proper training to help inform and equip respondents as regards the need to show or display positive attitude towards first aid victims.
 3. Government and private schools should ensure provision of an enabling environment, dedicated funding towards first aid and proper monitoring of first aid activities in schools

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