# Assessment of knowledge, attitude, and practice of public primary school teachers on school health programme in Bende Local Government Area of Abia State, Nigeria 

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#### Abstract

Background: The National School Health Policy recommends School Based Committee for schools which is responsible for the implementation of school health programmes (SHP). There are not enough medical doctors to deliver healthcare services in the primary schools hence teachers are looked upon to assist in healthcare delivery in schools. Teachers are in a vantage position to facilitate health among school-aged children. Children spend greater part of their time in school and have opportunity to regularly receive instructions in healthy living from their teachers.

Methodology: This was a descriptive cross-sectional study conducted in 34 public primary schools in Bende Local Government Area (LGA), Abia State. All the primary school teachers (320) in the LGA were studied. Data were collected using pre-tested self-administered questionnaire. Data were analysed using SPPSS version 26 and presented in frequency tables. Chi-square was used to test association between categorical variables. $\mathrm{P}<0.05$ was taken as statistically significant.

Results: Ages of the participants were positively skewed with a mean value of $39.5 \pm 6.793$ and a skewness of 0.136 . From the findings, 204(63.7\%) had good knowledge, 124 (38.7\%) had positive attitude and 150 (46.9\%) had good practice to school health services. There were statistically significant differences between socio-demographic characteristics and good knowledge and positive attitudes. There was statistically significant difference between sociodemographic characteristics and practice of school health services except marital status with a p-value of 0.108 .

Conclusion: The participants had good knowledge but negative attitude and poor practice of school health services. There may be need for training intervention studies in school health services to upgrade teachers' knowledge, attitude and practice. There should be a legislation in the state and country requiring prospective teachers to obtain a diploma in school health services before engaging in teaching profession.


Keywords: Knowledge; Attitude; Practice; Teachers; School health service; Abia State; Nigeria

## 1. Introduction

The National School Health Policy recommends School Based Health Committee for schools. This committee is responsible for the effective implementation of the School health programme in the school ${ }^{1}$. School Health programme

[^0](SHP) is an important component for the overall healthcare delivery system of any country. School Health Programme (SHP) comprises of all projects and activities in the school environment for the
promotion of health and development of the school and the community. In developing countries such as Nigeria where infant and early childhood mortality is high, its importance cannot be overemphasized. ${ }^{1}$

Teachers are in a vantage position to facilitate positive health among school-age children through the SHP. Lack of basic knowledge of the programme among them will hinder its effective implementation. Studies to gauge teachers' knowledge of SHP are needed to improve the current suboptimal level of implementation in Nigeria

Children spend much of their working time at school and there is no other setting where a large number of children can be provided with opportunities to regularly receive instruction in healthy living and engage in healthy behaviour. ${ }^{2}$ Children spend $2 / 3$ rd of their time in school when in session, and are at risk of injuries and accidents from involvement in sports and other non-school activities. Malaria, diarrhoea, helminthiasis, cough, flu, typhoid, Scabies, malnutrition, respiratory tract infections, STI commonly present as emergencies during school sessions. Emergencies leading to injuries can occur at any place; home, school, highway, workplace, public gathering Therefore, emergency preparedness in schools is as important as sending children to school for knowledge acquisition ${ }^{3-9}$

School Health Programmes can reduce the prevalence of health risk behaviors among young people and have a positive effect on academic performance ${ }^{10}$ Establishing healthy behaviors during childhood and maintaining them is easier and more effective than trying to change unhealthy behaviors during adulthood. ${ }^{11}$ In addition, school-age children (6-17
years) are in their formative years and are more impressionable and receptive to new ideas and concepts. ${ }^{12}$
It is universally recognized that the health of school children deserves special attention and in order to derive the maximum benefit from the educational programme, the child must be healthy physically, mentally and emotionally. ${ }^{13}$ Many schools in Nigeria are not equipped in terms of trained personnel and equipment to handle first aid during emergencies. ${ }^{14,15}$

It is commonly believed that a child's ability to attain her or his full potential is directly related to the complimentary effect of good health, good nutrition, physical activity and quality education. ${ }^{16}$ To attain educational achievements, children must fully participate in educational activities. ${ }^{16}$

Children and youth are recognized as a priority population. The national development depends on the academic success and optimal health and well-being of its children and youth. Schools are important settings for comprehensive health promotion. The school exerts the most influence on the lives of children and youth. Schools can play a key role in supporting students' health and, by extension, the health of their families and communities. ${ }^{17-19}$ Studies have also shown that teachers in primary schools can implement an effective health education program for school children. ${ }^{20-24}$ Hence, the aim of this study is to assess knowledge, attitude and practice of public primary school teachers on school health programme in Bende Local Government Area of Abia State, Nigeria

## 2. Materials and methods

This was a cross-sectional descriptive study from March to June 2019 among public primary school teachers in Bende Local Government Area (LGA), Abia state, South-east Nigeria. Bende LGA is a local government area in Abia state, Nigeria. It lies within approximately latitude $5^{\circ} 33^{\prime} 31.46^{\prime \prime}$ North and longitude $7^{\circ} 38^{\prime} 0.92^{\prime \prime}$ East. It has area of 59,080 hectares, 590.80 km 2 with a population of 192,621 according to the National Population Census (2006) projected to 252,300 up to 2016 with annual population change of $2.7 \%$ (2006-2016) with male to female ratio of 49.7/50.3. ${ }^{25}$ It is a rural community in the state. Her residents are made up of civil servants, teachers, traders, some engage in vocations such as commercial bus driving, tailing, shoe making, farming, patent medicine operators, employees of private organizations like schools, POS machines operations, hospitals.

### 2.1. Study design

It was a cross-sectional descriptive study conducted in Bende LGA from March to June 2020

### 2.2. Sample size

320 primary school teachers.

### 2.3. Sample size determination

Sample size was calculated using the following formulae ${ }^{26}$
$\mathrm{N}=\mathrm{z} 2 \mathrm{pq} / \mathrm{d} 2$ when the studying proportion greater than 10,000 , In case of Bende LGA where the population of teachers is less than 10,$000 ; \mathrm{nf}=\mathrm{n} /(1+\mathrm{n} / \mathrm{N})$;

Where:
$n$ - the desired sample size (when the population is greater than 10,000 )
z - The standard normal deviate, usually set at 1.96 (more simply at 2.0 ), which corresponds to the 95 percent confidence level
p - the proportion in the target population estimated to have a particular characteristic. If there is no reasonable estimate, then $50 \%$ (i.e.; 0.50 ) was used
q-1.0-p
d - degree of accuracy desired, usually set at 0.05 or occasionally at 0.02 but 0.05 was used in this study, $\mathrm{n}=\mathrm{z}^{2} \mathrm{pq} / \mathrm{d} 2=$ (1.96) (0.50)(0.50)/ (0.05)2 $=384.1$.

Using $10 \%$ as non-response rate, sample size for population greater than 10,000 will be: $384.1+10 / 100(348.1)=$ 422.51.

For population less than 10,000 with estimated sample size of 1000 as it applied to number of teachers in Bende LGA.

The sample size will be: $422.51 / 1+(422.51 / 1000)=422.51 / 1.423=297$
However, there are only 320 public primary school teachers in Bende LGA ${ }^{27}$ and so, sample size 320 was used in this study.

### 2.4. Subjects and selection method

There was a total of 34 public primary schools in Bende LGA and the number of teachers in the school vary from 8 to 12 teachers as the sizes of the schools are not the same and all of the teachers were selected.

### 2.5. Statistical analysis

Data collected was analysed using Statistical Product and Service Solution (SPSS) software version 26.0. formerly called Statistical Package for the Social Services. Data were presented in frequency tables, Chi-square test was used to test association between categorical variables, P - value of $<0.05$ was taken to statistically significant.

### 2.6. Ethical consideration

Informed consent of the study was obtained from Department of Community Medicine, Abia State University Teaching Hospital, Aba. Informed consent was also obtained from the head teachers and all the teachers of the 34 public primary schools. Meetings with the respondents from various schools were held, they were counseled, briefed on the objectives of the study, and thereafter their consents obtained before the beginning of the study.

## 3. Results

Table 1 Descriptive values from the ages of last birthday of the respondents

| Variables |  | Value |
| :--- | :--- | :---: |
| Descriptive values from age of last birthday | Mean | 39.49 |
|  | Std. Error of mean | 0.400 |
|  | Median | 37.00 |
|  | Mode | 34 |
|  | Standard deviation | 6.793 |
|  | Variance | 51.204 |
|  | Std. Error of skewness | 0.136 |
|  | Std. Error of Kurtosis | 0.272 |
|  | Range | 31 |
|  | Minimum | 25 |
|  | Maximum | 56 |
|  | Skewness | 0.672 |
|  | kurtosis | 0.698 |

Table 1 shows descriptive values from the ages as at last birthday of the respondents as follows; mean 39.5, median 37.0, Mode 34, standard deviation of 6.793, minimal age is 25 years, maximal age is 56 with age range of 31, The table shows that their ages as at last birthday of the respondents is positively skewed with the skewness of 0.136 .

Table 2 Socio-demographic characteristics of the respondents. Mean $-39.5 \pm 6.793$

| Variables |  | Frequency | Percentage (\%) |
| :---: | :---: | :---: | :---: |
| Age group | Equal and less than 39 | 180 | 56.3 |
|  | 40-49 | 85 | 26.5 |
|  | Greater than 50 | 55 | 12.2 |
| Total |  | 320 | 100.0 |
| Sex | Male | 80 | 25.0 |
|  | Female | 240 | 75.0 |
| Total |  | 320 | 100.0 |
| Marital status | Single | 40 | 12.5 |
|  | Married | 280 | 87.5 |
| Qualification of the respondents | Equal and less than national certificate of education | 230 | 71.8 |
|  | Greater than national certificate of education | 90 | 28.1 |
| Total |  | 320 | 100.0 |
| Years of experience | Equal and less than 10 years | 185 | 57.8 |
|  | Greater than 10 years | 135 | 42.2 |


| Total | 320 | 100.0 |  |
| :--- | :--- | :--- | :--- |
| Teacher's residential area | Within the community | 250 | 78.1 |
|  | Outside the community | 70 | 21.9 |
| Total | 320 | 100.0 |  |

Table 2 shows socio-demographic characteristics and their distribution: Majority of the respondents 180 (56.3\%) were equal and below 39 years, 85 ( $26.5 \%$ ) were in the age range of $40-49$ years, $55(12.2 \%)$ were in age range of $50 y e a r s$ and above. Majority of them $240(75.0 \%)$ were female and $80(25.0 \%)$ were males. Majority of them $280(87.5 \%)$ were married 60 (12.5\%) were single. Majority of them had qualification equal and greater than National Certificate of Education 230 ( $71.8 \%$ ) and 90 ( $28.1 \%$ ) of them had qualification greater than National Certificate of Education. Majority of them 185 ( $57.8 \%$ ) had years of teaching experience greater than ten while135 ( $42.2 \%$ ) had years of teaching experience equal and less than ten. Majority of them 250 ( $78.1 \%$ ) live within the community where they were located while 70 (21.9\%) live outside the community.

Table 3 Knowledge of school health service

| Variables |  | Frequency | Percentage (\%) |
| :--- | :--- | :---: | :---: |
| Knowledge of school health service | Good knowledge | 204 | 63.7 |
|  | Poor knowledge | 116 | 36.3 |
|  | 320 | 100.0 |  |

Table 3 shows the level of knowledge of school heal service of the participants: Majority of them 204 ( $63.7 \%$ ) had good knowledge of school health service while 116 (36.3\%) had poor knowledge. Majority

Table 4 Attitude towards health service

| Variables |  | Frequency | Percentage (\%) |
| :--- | :--- | :--- | :--- |
| Attitude towards health service | Negative attitude to health service | 196 | 61.3 |
|  | Positive attitude towards school health service | 124 | 38.7 |
| Total | 320 | 100.0 |  |

Table 4 shows the level of attitude of the participants towards school health services: Majority of them 196 (61.3\%) had negative attitude to school health services while 124 (38.7\%) had positive attitude

Table 5 Practice of school health service

| Variables | Frequency | Percentage (\%) |  |
| :--- | :--- | :---: | :---: |
| Practice of school health service | Poor practice | 170 | 53.1 |
|  | Good practice | 150 | 46.9 |
| Total | 320 | 100.0 |  |

Table 5 shows the level of involvement of the participants on the school health services: Majority of them 170 (53.1\%) had poor practice of school health services while 150 (46.9\%) had good practice

Table 6 Association between Socio-demographic characteristics and knowledge of school health services

|  |  | Knowledge of school health services |  |  | Total | $\chi 2$ | P - value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Poor knowledge (\%) | N | Good knowledge N (\%) |  |  |  |
| Age group | Variables | 66 |  | 114 | 180 | 0.000 | 48.296a |
|  | 40-49 | 49 |  | 36 | 85 |  |  |
|  | Equal and greater than 50 | 25 |  | 30 | 55 |  |  |
| Total |  | 140 |  | 180 | 320 | a-0cells (0.0\%) have expected count less than 5 . The min is 19.77 |  |
| Sex | Male | 21 |  | 59 | 80 | 0.037 | 4.348a |
|  | Female | 94 |  | 146 | 240 |  |  |
| Total |  | 115 |  | 205 | 320 | a-0cells (0.0\%) have expected count less than 5 . The min is 28.75 for $2 \times 2$ table |  |
| Married status | Single | 20 |  | 20 | 40 | 0.000 | 25.645a |
|  | Married | 115 |  | 165 | 280 |  |  |
| Total |  | 135 |  | 185 | 320 | a-0cells (0.0\%) have expected count less than 5 . The min is 14.38 for $2 \times 2$ table |  |
| Qualification | Equal and less than NCE | 74 |  | 156 | 230 | 0.025 | 5.031a |
|  | Greater than NCE | 41 |  | 49 | 90 |  |  |
| Total |  | 115 |  | 169 | 320 | a-0cells (0.0\%) have expected count less than 5 . The min is 32.34 for $2 \times 2$ table |  |
| Yearsexperience $\quad$ of | Equal and less than 10 years | 41 |  | 144 | 185 | 0.000 | 36.144a |
|  | Greater than 10 years | 74 |  | 61 | 135 |  |  |
| Total |  | 115 |  | 205 | 320 | a-0cells (0.0\%) have expected count less than 5 . The min is 48.52 for $2 \times 2$ table |  |
| Teachers' residential area | Within the community | 74 |  | 176 | 250 | 0.00 | 19.938a |
|  | Outside the community | 41 |  | 29 | 70 |  |  |
| Total |  | 115 |  | 205 | 320 | a-0cell less th table | have expected count e $\min$ is 25.16 for $2 \times 2$ |

Table 6: shows the association of socio-demographic characteristics and knowledge of school health service: Association of socio-demographic characteristics and knowledge of school health service were found to be statistically significant with $p$-value of $<0.05$.

Table 7 Association between Socio-demographic characteristics and attitude towards school health services

| Variables |  | Attitude school services | towards health | Total | $\chi 2$ | P - value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Negative attitude N (\%) | Positive attitude N (\%) |  |  |  |
| Age group | Equal and less than 39 | 84 | 96 | 180 | 0.000 | 53.133a |
|  | 40-49 | 57 | 28 | 85 |  |  |
|  | Equal and greater than 50 | 30 | 25 | 55 |  |  |
| Total |  | 171 | 149 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5. The $\min$ is 21.31 |  |
| Sex | Male | 40 | 40 | 80 | 0.000 | 67.483a |
|  | Female | 116 | 124 | 240 |  |  |
| Total |  | 156 | 164 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 31.00 for $2 \times 2$ table |  |
| Marital status | Single | 20 | 20 | 40 | 0.000 | 28.921a |
|  | Married | 156 | 124 | 280 |  |  |
| Total |  | 176 | 144 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5. The min is 15.50 for 2 x 2 table |  |
| Qualification | Equal and less than NCE | 106 | 124 | 230 | 0.000 | 79.219a |
|  | Greater than NCE | 60 | 30 | 90 |  |  |
| Total |  | 166 | 154 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 34.88 for $2 \times 2$ table |  |
| Years of experience | Equal and less than 10 years | 150 | 35 | 185 | 0.000 | 277.430a |
|  | Greater than 10 years | 11 | 124 | 135 |  |  |
| Total |  | 161 | 159 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5. The min is 52.31 for $2 \times 2$ table |  |
| Teachers' residential area | Within the community | 126 | 124 | 250 | 0.000 | 56.686a |
|  | Outside the community | 50 | 20 | 70 |  |  |
| Total |  | 176 | 144 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 27.13 for 2 x 2 table |  |

Table 7: shows the association of socio-demographic characteristics and attitude towards school health service: Association of socio-demographic characteristics and attitude towards school health service were found to be statistically significant with p -value of $<0.05$.

Table 8 Association between socio-demographic characteristics and involvement of school health services

| Variables |  | Practice of school health service |  | Total | $\chi 2$ | P - value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Poor } \\ & \text { practice } \quad \mathrm{N} \\ & \text { (\%) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Good } \\ & \text { practice } \quad \text { N } \\ & \text { (\%) } \\ & \hline \end{aligned}$ |  |  |  |
| Age group | Equal and less than 39 years | 72 | 108 | 180 | 0.000 | 29.213a |
|  | 40-49 | 57 | 28 | 85 |  |  |
|  | Equal and greater than 50 years | 41 | 14 | 55 |  |  |
| Total |  | 170 | 150 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 25.78 |  |
| Sex | Male | 40 | 40 | 80 | 0,000 | 94.118a |
|  | Female | 90 | 150 | 240 |  |  |
| Total |  | 130 | 190 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 37.50 for $2 x 2$ table |  |
| Marital status | Single | 26 | 14 | 40 | 0.108 | 2.589a |
|  | Married | 144 | 136 | 280 |  |  |
| Total |  | 170 | 150 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 18.75 for a 2 x 2 table |  |
| Qualification | Equal and less than NCE | 80 | 150 | 230 | 0.000 | 110.486a |
|  | Greater than NCE | 60 | 30 | 90 |  |  |
| Total |  | 140 | 180 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The $\min$ is 42.19 for a $2 \times 2$ table |  |
|  | Equal and less than 10 years | 170 | 15 | 185 | 0.000 | 12.477a |
|  | Greater than 10 years | 35 | 100 | 135 |  |  |
| Total |  | 205 | 115 | 320 | a-0cells ( $0.0 \%$ ) have expected count less than 5 . The min is 63.28 for a $2 \times 2$ table |  |
| Teachers' residential area | Within the community | 100 | 150 | 250 | 0.000 | 30.861a |
|  | Outside the community | 50 | 20 | 124 |  |  |


| Total | 150 | 170 | 320 | a-0cells (0.0\%) have expected count <br> less than 5. The min is 32.81 for $2 \times 2$ <br> table |
| :--- | :--- | :--- | :--- | :--- |

Table 8 shows the association of socio-demographic characteristics and practice of school health service: Association of socio-demographic characteristics and involvement of school health service were found to be statistically significant with p-value of $<0.05$ except marital status which was not statistically not significant with a p-value of .108.

## 4. Discussion

It is universally recognized that the health of school children deserves special attention and safeguarding the health of school children today will ensure the health of the adults tomorrow. ${ }^{28}$ The mean age of this study was $39.5 \pm 6.793$, the minimal age of the participant was 25 year and maximal was 56 years. There was a range of 31 and their age distribution was positively skewed with skewness of 0.136 .

Majority of the participants 204 (63.7\%) had good knowledge, 124 (38.7\%) had positive attitude and 150 (46.9\%) had good practice to school health services (Participants who got each stem of the questions successfully was scored one point and those who failed a stem question were scored zero point, total scores were computed and participants who got $\geq 50 \%$ were considered to have good knowledge and those who scored $<50 \%$ were considered to have poor knowledge, same was done for attitude and practice of health services). Various studies in the last 20 years or more in Nigeria have indicated poor status of SHP. ${ }^{29,30}$ In a study in Lagos, they recorded high level of awareness (92.9\%) due to the fact the respondents were trained professionally in education. ${ }^{31}$ One hundred and twenty four ( $38.7 \%$ ) had positive attitude to school health services and this is comparable in Yangon city where fewer (42.3\%) had positive attitude. ${ }^{32}$ However, attitude towards school health services was higher (69.6\%) in a study carried out in Myanmar ${ }^{33}$ where teachers had higher attitude towards school health services as a result of training and retraining of the teachers on school health services. In this study 150 (46.9\%) participants had good practice I school health services which is poor when compared to San-san Htway who recorded high (52.6\%) practice ${ }^{33}$ of school health services by teachers. This study had good knowledge but poor practice of health services and low in positive attitude towards health services and this comparable in a study in Edo State which reported good knowledge and practice ( $38.3 \%)^{34}$ in school health service and this may be due to inadequate training in school health services. However, another Myanmar study conducted among school teachers in Mingaladon township revealed higher knowledge level of 293 (76.1\%) the teachers (mean knowledge score of 46.26 with SD of 3.2). ${ }^{35}$ In Ogun state, SHP under the State Ministry of Health had been in place since 2007 in all Public primary and secondary schools in all the 20 LGAs in Ogun State. ${ }^{36}$ Therefore, it was not surprising that in a study conducted in the state ${ }^{37}$, almost all the teachers in both Ikenne (94.3\%) and Ifo (94.7\%) were aware of the SHP. Despite their high level of awareness, over half of the participants in the Ogun study had poor knowledge of school health. There was no statistical difference in knowledge between the teachers in the two LGAs. This similar to the findings in another study in Nigeria in which majority of the teachers had poor knowledge of school health. ${ }^{34}$ This poor level of knowledge among teachers about school health could be due to the fact that aside from their professional training in education, the teachers received no special training on school health issues.

The SHP is a promising framework which would enable schools and teachers integrate health initiatives in such a way as to address many of society's health issues. This will be possible if teachers have adequate knowledge of the school health such that they understand the programme, can interpret it and shape it to meet the needs of their school community.

Association of socio-demographic characteristics and knowledge, attitude and practice of school health services were found to be statistically significant at p-value of $<0,05$ except for the marital status of teachers that was not statistically significant with a p-value of 108 while in Myanmar ${ }^{33}$ there was a statistically significant difference in practice of health services between the age group but there was no statistically significant difference between years of experience in school health services and age group. Research has shown that SHP can reduce the prevalence of health risk behaviours among young people and a positive effect on academic performance. ${ }^{38}$

## 5. Conclusion

This study recorded good knowledge (63.7\%), high negative attitude (61.3\%), and poor practice (53.1\%) of school health services among teachers in Bende LGA of Abia State. Teachers' training curriculum has to be revisited by the

Ministry of education at the state and federal levels to address the challenges and differences with regards to school health services.

## Recommendation

Government at all levels should regularly organize workshops, seminars on school health services for the primary school teachers. There should be a legislation in the state and country requiring prospective teachers to obtain a diploma or certificate course in school health services before engaging in teaching profession. There may be further studies to assess teachers' training in school health services and this may encourage the use training intervention studies to upgrade teachers' knowledge, attitude and practice in school health services. More studies on knowledge, attitude and practice of school health services among teachers in many local government areas and states should be encouraged to enhance policy makers to make for more involvement of teachers in school health activities.

## Compliance with ethical standards

## Disclosure of conflict of interest

The authors declare no conflicts of interest regarding the publication of this paper.

## Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

## References

[1] Federal Ministry of Education Nigeria. National School Health Policy, 2006: 6-15.
[2] Coleman K J, Shordon M, Caparosa S. L, Pomichowski M. E, Dzwaltowski D. A. The healthy options for nutrition environments in schools (Healthy ONES) group randomized trial: using implementation models to change nutrition policy and environment and environments in low income schools. International Journal of Behavioral Nutrition and Physical Activity. 2012; 9: 80.
[3] World Bank group. Schools enrolment in Nigeria. http://www.worldbankgroup.org. accessed 29/05/2022
[4] Di Scala C, Gallagher SS, Schneps SE. Causes and outcomes of paediatric injuries occurring at school. J Sch Health 1997; 67:3 84-9. doi:10.1111/j.1746-1561, 1997. tb07182.x
[5] Haq SM,Haq MM. Injuries at school: a review. TEX Med 1999. 95: 62-5
[6] Li L-P, Wang S, Huang G, Luo J-Y. A survey on injury incidence in school children in Shantou City, China. Biomed Environ Sci. 2003; 16: 180-6.
[7] Sun YH,Yu IT, Wong TW, Zhang Y, Fan YP, Guo SQ. Unintentional injuries at school in China- patterns and risk factors. AcidAnal Prev. 2006; 38: 208-14.
[8] Sun YH, Yu IT, Zhang Y, Fan YP, Guo SQ, Wong TW. Unintentional injuries among primary and middle school students in Manshan City, eastern China. Acta Paediatr 2006; 95: 268-75.
[9] Boyce WT, Springer LW, Sobolewski S, Schafer C. Epidemiology of injuries in a large, urban school district. Paediatrics. 1984; 74: 342-329.
[10] Adeyinka Adeniran, Sonachi Ezeiru: School health practices among private secondary school administrators in an urban local government area in Lagos State, Nigeria, Int. J Community Medicine \& Public Health. 2016; 1: 932 - 937. Available at: http://www.ijcmph.com pISSN 2394-6032 | eISSN 2394-6040
[11] Centres for Disease Control. School Health Programs: improving the health of our youth, 2011. Available at: http//www. cdc.gov. Accessed on April 29, 2018.
[12] Nigeria National Demography and Health Survey 2008. National Population Commission Abuja.
[13] Lucas A. O, Gilles H. M. Short Textbook of Public Health Medicine for the Tropics, 4th edition. 2003: 332-402.
[14] Ogunkunle O., Olanrewaju D. Oyinlade O. An evaluation of school health services in Sagamu, Nigeria. Nigerian Journal of ClinicalPractice 2014; 17(3): 336. doi:10.4103/1119-3077.130236.
[15] Kuponiyi O. T., Amoran O. E., Kuponiyi O. T., School health services and its practice among public and private primary schools inWestern Nigeria. BMC Research Notes. Biomed Central. 2016; 9(1): 203. doi:10.1186/s13104-016-2006-6.
[16] World Health Organization (WHO), Comprehensive school health education, Recommendation and guidelines for implementation and strengthening comprehensive school health education in the (WHO) South East Asia Region, New Delhi. 2006.
[17] 2. Laforêt-Fliesser Y, Diane FP, Sarah L, Carol MD, Gloria M. School Health Guidance Document Standards, Programs and Community Development Branch. Ontario: Ministry of Health Promotion, 2010.
[18] 3. G. Saraswathy. Report of the National Meeting of the Directors of State Council for Education Research and Training (SCERT) on School Health Promotion (In collaboration with World Health Organization). New Delhi: National Institute of Health \& Family Welfare, 2007.
[19] 4. WHO, Global School Health Initiative. Available at: http://www.who.int/entity/school_youth_health/gshi/ en/ (accessed May 2018).
[20] Jodkowska M, Oblaciska A, Tabak L, Radiukiewicz K. The role of physical education teachers to support overweight and obese pupils. Med Wieku Rozwoj. 2010; 14(2): 197-206.
[21] Jourdan D, Pommier J, Quidu F. Practices and representations of health education among primary school teachers. Scand J Public Health 2010; 38(1): 86-94.
[22] Jourdan D, Stirling, Mannix McNamara P, Pommier J. The influence of professional factors in determining primary school teachers' commitment to health promotion. Health Promot Int 2011; 26(3): 302-10.
[23] Klepp KI, Ndeki SS, Seha AM, Hannan P, Lyimo BA, Msuya MH, et al AIDS education for primary school children in Tanzania: an evaluation study. AIDS J. 1994; 8(8): 1157-1162.
[24] Petersen PE, Hadi R, Al-Zaabi FS, Hussein JM, Behbehani JM, Skougaard MR, et al. Dental knowledge, attitudes and behavior among Kuwaiti mothers and school teachers. J Pedod Spring. 1990; 14(3): 158-64.
[25] Federal Republic of Nigeria, Population Census Gazette, No. 2 Abuja. 2009; 96: B 20-21.
[26] Onwasigwe C. N, Principles and Methods of Epidemiology; 2nd Edition. Dept of Community Medicine, University of Nigeria, Enugu Campus, Enugu, Nigeria. 2010; 149-152.EL Demak, 76 Robinson Street Uwani, Enugu. 2010; 149-152.
[27] Abia State Ministry of Education, record of public primary school teacher's list of Bende LGA 2020 April.
[28] Lucas AO, Gilles HM. Short Textbook of Public Health Medicine for the Tropics, 4 th edition. 2003:332-402.
[29] Ojugo AI. Status of health appraisal services for primary school children in Edo State, Nigeria: International Electronic Journal of Health Education. 2005; 8: 146-52.
[30] Nwimo IO. Status of health appraisal services in secondary schools in Owerri education zone, Imo State. Journal of Health and Kinesiology. 2001; 2: 94-107
[31] Adenyinka Adeniran and Sonachi Ezeiru: School health programme practices among private secondary school administrators in an urban local government area in Lagos state, Nigeria, Internal Journal of Community Medicine and Public Health. 2016; 3: 932. DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20151570.
[32] San-San-Htway. Perspective of school teachers on school heal in Yangon Division: University of Medicine. 1998.
[33] Ye Minn Htun, Kay Thi Lwin, New New O O, Kyaw Soe, Than Tun Sein, Knowledge, attitude and reported practice of primary school teachers on specified school health activities in Danuphyu Township, Ayeyarwardy Region, Myanmar South East Asia Journal of Public Health ISSN: 2220-9476. 2013; 3; 24-29. Htun et al., publisher and licensee Pu .
[34] Ofovwe G. E, Ofili A. N Knowledge, attitude and practice of school health programme among head teachers of primary school in Egor LGA of Edo State, Annals African Med. 207; 6; 99-103.
[35] Win-Naing. Role of teachers in School Health in Mingladon Township, Yangon Division. [thesis] MMedSc (Public Health). Yangon: Defence Services Medical Academy, 2008.
[36] Ogun State Government. Economic Plan Development 2012 - 2015 Pg 50 -51. Available from http://www.ogunstategov.ng/ OGUN STATE HEALTH MASTER PLAN. pdf. Accessed April 4, 2015
[37] Odeyemi KA Chukwu EE; Knowledge, attitude and practice of school health among primary school teachers in Ogun State, Nigeria. Niger J Paed 2015; 42 (4): 340-345. DOI:http://dx.doi.org/10.4314/njp.v42i4.11
[38] Centres for Disease Control. School Health Programs: improving the health of our youth, 2011. http//www. cdc.gov. Accessed April 29, 2013


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